Grand·Prix

international

N° 10 : GREAT BRITAIN : 75 P - CANADA : SCAN 2,95

Professional tool
selected by Auto-Hebdo
by pro-photographers to record
the Formula 1 Grand Prix races.

Public's favorite
appointed "Camera of the Year"
by Britain's Practical Photography
readers and Germany's Photo
Revue.

Press' marvel
"The A-1 is an extraordinary
camera, perhaps the most
sophisticated 35 mm ever to
reach the market", Popular
Photography, U.S.A.

Official Camera of the 1978 Soccer World Cup Buenos Aires, Argentina

Official Camera of the 1978 Asian Games

Official Camera of the World Championship Tennis

Official 35 mm camera to the XI Commonwealth Games Canada

THE OFFICIAL 35 MM CAMERA OF THE 1980 OLYMPIC WINTER GAMES

Canon

IN THIS ISSUE

Page 6 : Alan Jones has finally done it. The Australian has thrown off his car beaking image.

Page 12 : Ferrari and Ligier are duelling again. The French are regaining ground, the Italians are losing a little.

Page 42 : Laffite is well placed in the World Championship. We went to see him on holiday in Normandy. He told us how his situation has changed.

Page 4 : the Hockneheim paddock. **Page 14 :** how the grid was won. **Page 16 :** the film of the race. **Page 20 :** Arrow' second gamble. **Page 24 and 41 :** a postcard from Hockneheim. **Page 25 :** the German Grand Prix in pictures. **Page 48 :** lap by lap. **Page 40 :** Hockneheim statistics. **Page 52 :** Giorgio Piola's technical feature : the Copersucar F6A. **Page 54 :** Maurice Hamilton's article. **Page 56 :** Carlos Reutemann
Posters : Alan Jones (williams FW 07) and D.Pironi (Tyrrell 009)

150,000 copies of this issue have been published.

Grand·Prix international
(Austria and Holland)
IS ON SALE 10 DAYS
AFTER DUTCH GRAND PRIX

REVENGE

When a leader fails to come round, one feels a sort of strange sadness, even a little frustration and anger. It doesn't matter who is the driver, nor which car it is, nor why the car stopped or retired. When a leader doesn't pass, there's the feeling of injustice mixed with surprise. Something's missing. For the statiticians, there's the lack of logic, for the sentimentalists, disappointment.
For a few months now, Jones has been one of those leaders who goes missing. At Zolder we got used to seeing the Williams leading, running like clockwork towards certain and much deserved victory, only for that hope to be cruelly dashed when the white car disappeared. The same thing happened at Monaco, to a lesser degree, and then again at Silverstone. Lady Luck was not with Jones, as she hadn't been in the past with Chris Amon for example. Jones had so often been heading for the winner's rostrum, and yet each time he never quite managed to make it. So at Hockenheim, even through one was dreading it, there was just that chance that Jones wouldn't come round. It was a thought that was unhappily one that came though force of habit. Then came a punctured tyre. Was that going to deprive him of the chequered flag this time ? Fortunately that wasn't the case. On taking the chequered flag, Alan happily waved his fist. And finally he felt satisfied. He'd done more than just win, he'd had his revenge.

GRAND PRIX INTERNATIONAL IS DISTRIBUTED BY SEYMOUR PRESS LTD : 334 Brixton Road-London SW9-7AG. Telex : 8812945 Seypress London. CHIEF EDITOR Eric Bhat. ASSISTANT EDITORS : Bob Constanduros. CONTRIBUTOR : Maurice Hamilton, Lionel Froissard. ARTISTIC DIRECTOR : Marc Tournaire. EDITORIAL SECRETARY : Régis Lacroix. ILLUSTRATIONS : Nicolas Géron. PHOTOGRAPHERS : A + P, Bernard Asset, Harald Strebelle, DPPI. Camera CANON. GRAND PRIX INTERNATIONAL is published by S.N.E.P. PUBLISHING DIRECTOR : Michel Hommell. ASSISTANT DIRECTOR : Gérard Lips. EDITORIAL ADMINISTRATION : 7, rue de Lille, 75007 Paris, Tél. : 260.34.65. ADVERTISING : Profil 18/30, 7, rue de Lille, 75007 Paris, Tél. : 260.34.65. COMMERCIAL DIRECTOR : Philippe Máchin. PHOTO SETTING : Typo-Elysées, Compotronic. PHOTOGRAVURE : RPM. DISTRIBUTED IN ITALY by : ME. PE. via Carcano 32 20141 Milano. Tel. : 02/8438141. DISTRIBUTED IN GERMANY : W.E. Saarbach GmbH 5000 Köln 1, Postfach 10 1610 Follerstrasse 2. Tel. : 0221/244631. Telex : 8881067. DISTRIBUTED in France by : NMPP. Distributed in Belgium by : A.M.P. 103, rue de la Petite-Ile, Brussels. DISTRIBUTED in Argentina, Brazil, South Africa, Canada, U.S.A., Holland, Spain, Switzerland, Sweden by : G.I.H. PRINTED IN FRANCE by : SARI, Montlouis, Clermond-Ferrand, SNIL/PPR. Commission Paritaire : 61611.

The paddock in Hockenheim

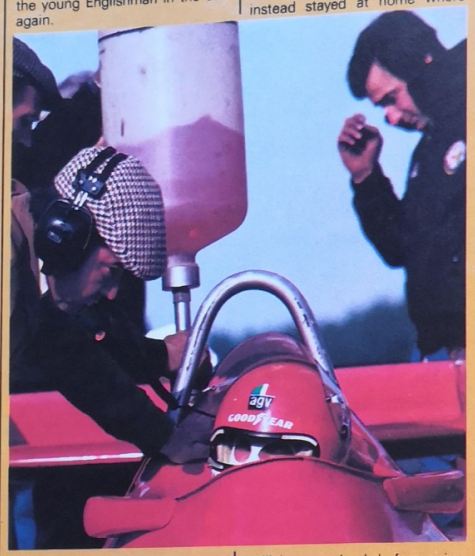
OSELLA F1, NEXT YEAR FOR SURE

The drawings for the first Osella Formula One car, are, it seems, completed. The car will probably be in Formula One next year complete with Pirelli tyres, and probably driven by Eddie Cheever, currently in contention to whin the Formula Two championship for Osella.

GEOFF LEES TAKES OVER FROM JAMES HUNT

As Jean-Pierre Jarier was unable to do the German Grand Prix because he was ill with hepatitis, Ken Tyrrell had to find another driver as quickly as possible. Bruno Giacomelli went to London to have himself fitted into a Tyrrell, but while waiting to go to the Tyrrell works, a phone call came from Alfa Romeo (to whom he is contracted) reversing their earlier decision to let him drive for Tyrrell. So Tyrrell reckoned that he would only enter one car for Didier Pironi in the German Grand Prix. However, pressure, it seems, from Bernie Ecclestone caused him to run a second car for Englishman Geoff Lees, who thus became the first Englishman since James Hunt retired to race in a Grand Prix. Tyrrell took the decision to run Lees at the last minute. With Candy as his Italian sponsor, there was pressure from the Italian press to run an Italian hopeful, especially as Lees wasn't on the list of replacement drivers published at the beginning of the year by FISA. But Lees's record shows that he is worthy of the drive. He won two Aurora races last year, and finished fourth twice in European Formula Two races.

Even though Lees was fairly staggered by the downforce given by wing cars, he progressed well. If Jarier isn't better for the Austrian Grand Prix, then it seems likely that Tyrrell will run the young Englishman in the car again.



ALFA FI WAITING FOR MONZA

Vittorio Brambilla, theoretically, should have made his Formula One return at Hockenheim driving the Alfa Romeo Al that has so far been driven by Bruno Giacomelli in Belgium and France. But the team didn't turn up in the end. There were different reasons for this it seems. *"Our car is old, and wouldn't have been very competitive,"* Carlo Chiti told us. *We would prefer to concentrate our efforts on preparing the new Alfa of which there may be two at Monza. We should start testing at Balocco during August if the car is ready in time."*

A second reason for the Alfa's withdrawal was slightly less official. It concerned Vittorio Brambilla's health. It seemed that certain drivers wanted him to have a medical chek-up to ensure that he had fully recovered from is Monza injuries. Possibly Vittorio didn't want the embarrassment of an on-track check, and instead stayed at home where he'll have a check before going to Monza.

RENAULT'S MANAGING DIRECTOR COMES TO WATCH

M. Vernier-Palliez, the managing director of Regie Renault, was at Hockenheim to see his second-ever motor race, and to watch his cars defending the name of his company. The first time he went to watch a race was at Le Mans where he saw a Renault win in 1978. Things weren't so good at Hockenheim, but at least he saw one of his cars start from pole position.

ELFORD REPLACES OPERT AT ATS

It's strange, but a Grand Prix always bring out all the personalities in motor racing. They come back for nostalgic purposes, to meet friends, some even have some work to do. But Vic Elford wasn't there just to meet friends. Elford of course was a rally driver, sports car driver, and finally got into Formula One in the 1960/70s. It seems that he might return to Formula One, for Gunter Schmidt contacted him to ask him to replace Fred Opert as ATS team manager. *"It's one of the reasons that I'm here,"* said Vic. *"It's the best way of watching the team at work"*. Elford was intending to talk to Schmidt about his working conditions, insisting that he would be completely in charge of the team. It seems that by the end of the weekend, everything was tied up, Elford was back in Formula One again. *"I'm very happy to be back,"* he admitted, *"because my current business isn't that interesting. After I left Inaltera in 1977, I started a little import-export business in Brussels, but it isn't very exciting."* Vic Elford hadn't been to a Grand Prix since 1977 at Monaco, so it was interesting to ask his views on Formula One following his new appointment. *"I find, like many others, that there is a lot to criticise in Formula One. But in spite of the politics and the business problems, Grand Prix racing is the most interesting part of motor racing. Formula One is not really a sport any longer, it's a show. But it's not the only sport where business plays an important role, and public interest in Formula One doesn't suffer because of it. On the personal front, I've been quite surprised that people still remember me. Of course, I still remember people, but they still remember me. I was afraid that because the business aspect is so important now that personal relationships would have suffered, but I've been surprised and happy here at Hockenheim that hasn't been the case. The atmosphere is perhaps more friendly than before. I've found the atmosphere this weekend very relaxing."*

TWO DEVELOPMENTS AT LOTUS

Colin Chapman doesn't give up easily. When he thinks and believes in an idea, it's hard to make him forget it. He's still convinced that the Lotus 80 can work, even though it's not been very satisfactory up to now. It still won't run successfully without the rear wing as it's meant to. A research and development programme is currently in progress on Chapman's latest, particularly on the aerodynamics. A recent test in the wind tunnel gave some useful information about the car, and the 80 may reappear at Zandvoort, or even at Monza, after considerable aerodynamic modification. The 80 will also be fitted with new rear suspension.

At the same time, new Lotus 79s will be run at the Austrian Grand Prix, and one of them was probably going to be tested at Zeltweg the week after the German Grand Prix. *"Everything behind the engine is new,"* Nigel Bennett told us. 2 *"In fact the rear end is a very similar to that on the 80, using the same gearbox* (lighter than that on the 79), *and the brakes are in the wheels. But the bodywork will be the same as on all the 79s."*

PETER GETHIN: SIX YEARS ON

Another well-known motor racing personality at Hockenheim was Peter Gethin, former Formula One McLaren and BRM driver. *"I haven't been to see a Formula One race since... 1943,"* joked Gethin, well-known for his sense of humour. *"No, in fact it was the Canadian Grand Prix in 1972 when I last drove for BRM. Since then I've only seen Grands Prix on television."* Peter had come to Hockenheim to look after Geoff Lees whose career he's masterminding. He's also involved with Stephen South. *"But I've done a lot more for Lees than Soth up to now,"* he admitted. Gethin has completely abandoned the idea of being a team manager, a job he did last year for the Briggs Formula Two team. *"It's very discouraging working for a team that has absolutely no chance of success."*

LAUDA'S THIRD PROCAR WIN

He may not be winning Grands Prix, but Niki Lauda is winning Procar races. He took his third win of the season at Hockenheim. He was challenged by both Didier Pironi and Jacques Laffite, but latter dropped back with gearbox trouble, and Pironi was overtaken by Hans Stuck who finished second.

IROC: GETTING IT TOGETHER

A representative from IROC (International Race of Champions) was at Hockenheim to contact some of the Formula One drivers about driving in the first IROC race at Atlanta (Georgia) next October 27/28. The traditional series of races poses Formula One drivers against the best American drivers. Alan Jones, Emerson Fittipaldi, John Watson, Mario Andretti and Jacques Laffite are already going over for the series. The IROC man also hoped to get Jean-Pierre Jabouille and Carlos Reutemann to do the series. Jacky Ickx will also be doing it but as a CanAm driver.

A RACE, A MECHANIC:

ANTONIO BELLENTANI (FERRARI)

In general, Formula One mechanics are young men. The itinerant life—and demanding too—that they lead season after season is tiring. After a while they become saturated with the life and often prefer a more relaxed form of work. But Antonio Bellentani has overcome these problems. At 47-years-old, he's a Ferrari chief mechanic. The Scuderia has always given such responsibility to well experienced men.

He's a big, bald, brute of a man. One can imagine that he may be quite placid, but in fact he works hard. He's the chief mechanic on Jody Scheckter's car. Sometimes Antonio Bellentani gets excited, but without getting angry. He gives his orders efficiently, he works on the car himself, he concentrates, conscious of his responsibilities and proud of his work.

Belonging to the Ferrari works team, for a mechanic, is an honour, almost more than that. The team of mechanics working for the Scuderia have always been surrounded by the reputation of the name that they represent, and equally for what that name has represented in the past. Remember Mario Andretti's accident at Ontario in 1971. The car was destroyed, it almost certainly couldn't take part in the race. But the mechanics worked hard and brought about a virtual miracle. The Ferrari was repaired and Mario won the race.

Antonio Bellentani started off with the sports car team in the World Championship of Makes. That was way back in 1962, the year he began to work for Ferran. *"Races were very long and our job was harder than it is now"*, he says. *"We were working on both Formula Cars and sports cars. The long distances races were very hard, particularly the 24 hour races. Once at Le Mans, a mechanic fell asleep under the shower he was so tired..."*

Bellentani became a sports car chief mechanic in 1969 and moved to Formula One in 1973 when Ferrari concentrated on Formula One and abandoned the sports car programme. But Bellentani enjoyed his sports car days. *"The P4 and 312P cars were tremendous, the most beautiful I've ever worked on."*

Formula One was a great experience for Bellentani. He rapidly became a respected and hard-working mechanic to the extent that he was promoted to chief mechanic when Carlos Reutemann arrived in the team at the end of 1976. He was already over 40, which no doubt helped him being chosen for the job. Within the Scuderia, such appointments are only made to men who have been in racing a long time. Perhaps that's the reason for the fantastic reputation that they've built up under Peter Schetty and Mauro Forghieri which is virtually folklore now. *"They have Latin spirit and English ability"*, they say of the Ferrari team.

Although he's reserved, Bellentani has great regard for Jody Scheckter. "his" driver, especially for his exuberance *"When he's happy, he passes the time joking and playing around like a kid."* But Bellentani's really favourite driver was Lorenzo Bandini. *"I loved him like a brother. He was always with us, working with us, encouraging us. I was very upset when he was killed."* There may not be an Italian driver within the team, but that makes little difference to the mechanics. *"We always get on better with the Italians. But when they go, or maybe when they have a bad accident, it's that much harder on us."*

IT MAY ONLY BE THE START

After so much bad luck, he thought he was jinxed. But he still hoped for the best. And the German Grand Prix was the light at the end of a dark tunnel. Now Alan Jones can be considered a winner and no longer someone who retires in the lead. Frank Williams see him as one of the three best drivers in the World. With Patrick Head, Frank and Alan are going places. Success has strengthened their will.

by Eric BHAT

"I was fourth, and what good's that? I want to win, that's all", Alan Jones was really annoyed. Jean-Pierre Jabouille, the winner, hadn't even mounted the winner's rostrum after the French Grand Prix. Yet Alan was already talking of his disappointment. He was still flushed from his exertions over the last hour and a half, yet he was more angry than tired. He brushed off the journalist who was asking him questions. *"You want to know what happened? You can write what you want, the engine, gearbox, brakes, I don't care. All I know is that I didn't win."*

It was easy to understand Alan's predicament on July 1 at Dijon. Fate had all but snubbed him. In Belgium and at Monaco, he'd been heading for a good position, a win at Zolder, third in Monaco, yet on neither occasion had he finished. And at Dijon, when he wasn't in contention for the lead, he'd finished. Destiny wasn't dealing him a fair hand.

VERY DISAPPOINTED

And that wasn't all. Two weeks later at Silverstone, fate dealt him another blow. He was well in the lead when he had to pit when the engine failed. That time, Alan was no longer angry, he was too disappointed for that. *"It very much wanted to win the British Grand Prix, because it was more or less my home event. And I wanted to give Frank his first Grand Prix victory. I've worked very hard with the team, and I wanted to give Frank his first win. And I retired. I wasn't as angry as I thought I would be, just very disappointed."*

What was the point of being angry when that good result was already gone? When Frank asked him if he'd been driving too hard, Alan smiled sadly. He just said quietly: *sorry, but I was pretty slow."* A straight explanation without complaint.

When the car was overhauled back at the factory, Alan was indeed vindicated. *"The engine broke because of a fault in a pipe to the water pump,"* explained Frank Williams. *"Aweld cracked, the water leaked out and a piston seized."*

"It could have happened at 5 mph or 180 mph, it makes no difference," added Alan Jones. *"The way I was driving had nothing to with what made me stop. I was revving the engine to 10,700, I was braking early, I was watching the temperatures all time, I thought I had everything under control. And I still retired."*

When reasoning is pushed to its limits, perhaps it would have been better if Alan had pushed the car too hard. At least that way he could have found a remedy, not to do the same thing next time. But the way things turned out, what could he say, what could he do?

Even though Alan's a fairly solid bloke, he began to have his doubts. Was he jinxed? His morale was a little low when he arrived at Hockenheim for the German Grand Prix. *"Losing races like that just isn't right, it's very hard, very difficult, heart-breaking,"* was how he explained those lost wins. *"I'm sick of it. I'm sure that during the early part of my career I must have had some lucky results and now I'm payingfor them. But I'm sure my luck will change, things will be different, and when they are, i think I'll have a very good run."*

After Zolder, Monaco, Silverstone, opinion was that Jones was perhaps too determined. The Australian driver was a victim of his own reputation, one that would normally have been flattering, yet seemed to be working against him. Certainly Jones shows that he's an attacking driver, he's determined, he's a fighter. It's often the talk of the racing circus: *"Jones really tries hard"* they say, and before Hockenheim, they were adding: *"perhaps a little too hard."* But Alan's character is such that he makes light of such criticism. *"People will always say things, and they can say what they like. If I'd won at Silverstone they would have said that I should gone quicker or something..."*

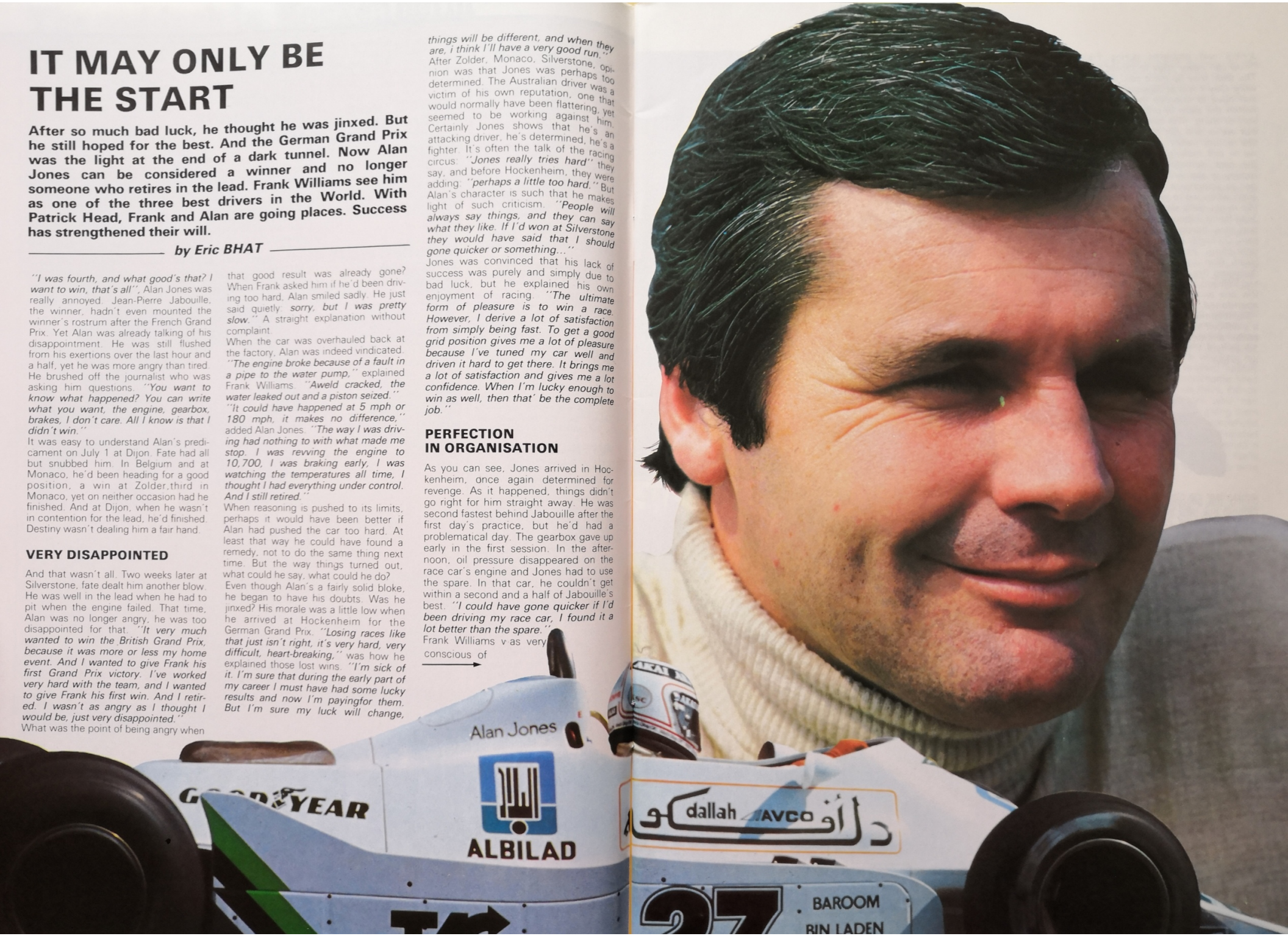
Jones was convinced that his lack of success was purely and simply due to bad luck, but he explained his own enjoyment of racing. *"The ultimate form of pleasure is to win a race. However, I derive a lot of satisfaction from simply being fast. To get a good grid position gives me a lot of pleasure because I've tuned my car well and driven it hard to get there. It brings me a lot of satisfaction and gives me a lot confidence. When I'm lucky enough to win as well, then that' be the complete job."*

PERFECTION IN ORGANISATION

As you can see, Jones arrived in Hockenheim, once again determined for revenge. As it happened, things didn't go right for him straight away. He was second fastest behind Jabouille after the first day's practice, but he'd had a problematical day. The gearbox gave up early in the first session. In the afternoon, oil pressure disappeared on the race car's engine and Jones had to use the spare. In that car, he couldn't get within a second and a half of Jabouille's best. *"I could have gone quicker if I'd been driving my race car, I found it a lot better than the spare."*

Frank Williams was very conscious of

→



Jone's two problems during Friday. *"You can never relax in motor racing. The team may be more consistent following Clay's win at Silverstone, but we still have to improve the organisation within the team in order to avoid this sort of thing. The cars may be quick, but we've still got to make progress. We're not really working perfectly, we're still making small mistakes on the cars, sometimes we're spending money in the wrong way. We've still got to improve a lot of little things, even when we're working in the pits. We're not really slick."*

Jean-Pierre Jabouille set his pole position time thanks to slipstreaming two cars. On Friday evening during the usual debriefing, Frank Williams, Patrick Head, Alan Jones and Clay Regazzoni discussed the possibility of running the two Williams together so that they could tow one another. *"But in the end we abandoned the idea,"* said Frank. *"Slipstreaming is important here, but it's difficult to arrange. You still need a certain amount of luck if it's to work."*

Jones didn't have the use of a tow during the second qualifying session. Without any help from another car, but using his normal car, he improved by 1"2. That confirmed his front row position, but it wasn't quick enough to bump Jabouille off pole position. The French driver's Renault constituted Jones's greatest threat. *"I'm going to have a lot of trouble at the start of the race"*, Jones reckoned on Sunday morning. *"The Renault is a lot faster thant the Williams in a straight line."*

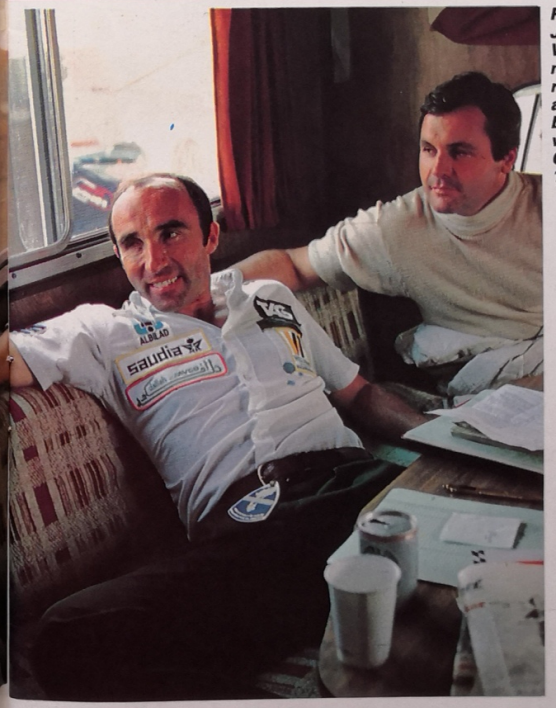
Jean-Pierre talked of acceleration after the warm-up: *"with full tanks you can really feel the weight of the car. I'm slower under acceleration than the Fords and Ferraris"*. When Jones learnt of Jabouille's comments, he said *"I'll willingly swop my acceleration for his straight line speed."*

Both the Frenchman and Australian suspected that one of the two of them would win.

SILVERSTONE ACTION REPLAY

In fact both of them took off at the start of the race, leaving the rest behind. But contrary to his suspicions, it was Jones who led, seemingly at ease. The heat that filled the Hockenheim bowl caused a slight loss of power on the turbo engine and that lost it a little top end speed. Jabouille tried really hard to keep up with the Williams, to such an extent

Alan Jones was the winner of the German Grand Prix, and there's no reason to suspect he won't win more races.



Patrick Head, Alan Jones and Frank Williams: three men with high regard for one another, motivated by the same will to win the World Championship in 1980.

that he made a small mistake on the eighth lap which cost him the race.

The race was now dominated by Jones. And bad luck? Was it following Jones in his slipstream? At that time, the German Grand Prix was strangely reminiscent of the British. Jabouille was out, and Jones was alone in front, but there was still along way to go.

It was a long wait for Frank Williams who really wanted his number one driver to win. For Frank in the pits, just as for Alan Jones in the cockpit, the final laps seemed to take forever. Equally, the 100,000 spectators seemed to think that Regazzoni would take victory again, for he was catching his team leader in leaps and bounds. Jone's engine had started to misfire. Then even worse, one of his rear tyres had a slow puncture. Frank didn't stop fiddling with his stop watch.

But Alan made it in the end. Never had a chequered flag made him so happy. *"I haven't won a Grand Prix since Austria in 1977. It's a long time to wait for another, it's almost like winning my first Grand Prix"*, he laughed happily after the race in the motorhome filled with journalists. Frank was there, Patrick Head and Clay Regazzoni who had capped the Williams day by giving them a 1-2. It was perhaps the experienced Swiss who was the happiest and relaxed of them all. The other three seemed a little strained, as though they really wanted to be alone to savour the taste of victory together.

In fact the three of them are really close friends and colleagues. Frank has tremendous regard for the two men who could do so much for him, and he doesn't hide the fact. *"As far as I'm concerned, it's quite clear that Alan is one of the three best drivers in the World along with Villeneuve and Reutemann. And Patrick makes it happen thanks to his car. Without him we wouldn't be where we are now. I have complete confidence in Patrick, I rely on him a great deal. He's completely in charge of the technical side of the team. He's built up a team of technicians around him, and he leads them. Patrick consistutes 50 per cent of our success."*

NORMAL MEN

Patrick Head is like Alan Jones: descreet, unobtrusive yet good at his job. On the other hand, that's perhaps normal for a designer who's rather more in the shadows than for a public man like a driver. Alan Jones is perhaps one of the more paradoxical Grand Prix drivers, because his behaviour on the track is unlike his behaviour off it. He seems a calm man, a quiet family man, not the sort of guy who drives a car as hard as he does. It's only when you get a lot closer to him and talk to him that you discover his real determination, even though it's obvious when you're watching him on the track.

→

THE FUTURE

And it's on Jones that Frank Williams relies to win the World Championship. The plan for the immediate future is to exploit the current car's potential. Jones is optimistic: *"We should go well in Austria. Zeltweg might even suit the cars beter than Silverstone and Hockenheim. We'll go well there, we'll go well at Watkins Glen, Montreal, even at Monza. We should go well everywhere, we've got to beat the Renaults."*

Frank has a long term view of things: *"we're going to have a real go at the 1980 World Championship"*, he said at the start of the season. Success has helped. The Saudi budget is to be increased from three million dollars to four million for next year. *"That's the amount we're going to need to beat Renault and Ferrari"*, Frank reckons. *"I want to be the best English team in Formula One and to take on the two main Contental teams with equal resources."*

Frank's now a winner, he's forgotten his struggling past. *"I'm a little embarrassed really, it's taken me a long time to win and I'd prefer to forget what's happened during the last few years. Now we've got to keep winning. The road is open to us, but it's a long one."*

Alan Jone's ambition is similar and he knows what Frank is thinking: *"I think Frank is like a shark. He's had a taste of blood and now he wants more."* □

Alan Jones's first Formula One drive was in a Hesketh 308, then he moved to Embassy Lola (illustrated).

FERRARI-LIGIER: THE DUEL CONTINUES

It's going to be a Ferrari or a Ligier. That's been obvious since Monaco. Jones and Jabouille may now be the race winners and the men at the front of the field, but at a respectable distance, Scheckter and Laffite are still fighting over which of them will become World Champion. As at Silverstone, the Frenchman and South African were battling against one another at Hockenheim. The Ligier team were somewhat happier in Germany. The Ferrari team were a little more on edge. It's an odd championship.

The scene is Dijon, not so very long ago. Jody, seeing Jacques in the paddock, walks over to him. Laffite had been battling hard in the middle of the field during practice. Scheckter, on the other hand, was at the front of the grid with the Renaults. The Ferrari driver takes advantage of the situation to tease his main rival in the World Championship. Taking Jacques by the hand, he speaks to Jacques like a mother to her child. *"Don't worry, Jacques, it's not serious."* Laffite smiles and returns, in French, *"yeah, yeah, you'll see, I'll get my revenge."* Jacques is an easy-going sort of fellow, and Jody can be the same when he's confident among friends. There's no tension between the two of them. It was apparent a month later at Hockenheim. The placing of motorhomes and caravans in the paddock just happened to position the Ferrari and Ligier teams alongside one another.

Naturally the teams passed one another frequently throughout the three days, and they exchanged amused smiles and jokes each time they passed. Marco Picinnini even dropped in for an Armagnac with the French team. Half-joking, Guy Ligier asked him about the problems of the Ferrari turbo engine. *"Turbocharged engines are going to kill Formula One. You're going to race your Ferrari turbo soon. You're not going to sell engines. Renault aren't going to sell their's. What are the rest of us going to do?"* Ligier's tone was earnest, but Picinnini suspected a trap: *"what turbo? We haven't got a turbo engine."* Ducarouge almost choked on his Armagnac. *"Come one,"* he laughed, *"you've been testing it for ages. Six months ago you told me what tremendous power you're getting from it."* And the conversation continued without the least aggression. It was a typical exchange between the teams. There'll be more like them between Ligier and Ferrari at race tracks. The Latin teams don't just stare at one another like cats on a wall.

"TOM'S" ANGER

"You're getting lucky again," Scheckter shouted to the Frenchman on Friday afternoon as he went back to the Ferrari caravan. After their considerable lack of form at Dijon and Silverstone, the Ligier team were a little more confident at Hockenheim. Jacques set third fastest time in practice. On the other hand, the Ferraris were floudering. Scheckter was ninth quickest, Villeneuve twelfth.

A few minutes earlier, during the qualifying session, the normally calm and pleasant Tomaini who works on Gilles' car had blown his top. Red in the face and furious, he threw his note book down on the ground. At that time, Gilles was having his brakes adjusted. *"Everyone loses their temper from time to time,"* he said later. *"There are little moments like that in every team. It makes no difference to me."*

Gilles' calm reaction leaves one to suspect that "Tom's" anger was directed towards him. *"No, not really,"* said the Italian later. *"I was mainly angry because of the times. I was expecting Gilles to be a lot better qualified than twelfth. We came here for private testing after Dijon. We were using tired engines and Gilles set a 50"3. I reckoned that that would be a competitive time. Then during the first qualifying session, we couldn't do better than 51"2. I was really amazed to see the times, and the drivers were just as surprised. We haven't been able to find a plausible reason for them. We don't seem to be adjusting the car in the right way. When things start to go wrong, it's almost catching and we don't make progress. That's why I was angry."*

Forghieri was very evasive as he usually is when things are going wrong. *"Look at the list of times. You see where Jody is? You see where Gilles is? That's where the problem lies. The others are quicker than us."* When you question him further, he becomes a little more lucid: *"just as at Silverstone, Hockenheim has a lot of flat out driving. I knew that we wouldn't be very competitive here."*

Villeneuve summed up the situation: *"I'm having a lot of trouble trying to get my car to do what I want it to do."*

Things improved considerably the next day, principally for Scheckter who set fifth quickest time, gaining a whole second in relation to his Friday time. *"I know why you set a 50"00,"* Marco Picinnini laughed, *"it's exactly the time that you said you would set in the competition as to which driver can set a time closest to the one he guesses he can set."* Jody had forgotten the fact. He burst out laughing. *"There, you see Marco, I'm neither optimistic nor pessimistic. I'm realistic."* Then, turning to us, he explained: *"There's something strange about the temperature here. They say it's getting hotter. Perhaps it wasn't favourable to us yesterday. I haven't really altered the car much. I made slight adjustments to the anti-roll bars, springs, but nothing great."*

Villeneuve jumped up two rows of the grid during the second session. *"It's not going too badly,"* he said without a lot of enthusiasm. *"I'm fast enough on the straight, but slower in the stadium. It's the opposite now of what it was in private testing, the car isn't good at low speed."*

The Scuderia were somewhat downcast at the end of practice, they hadn't really made much progress.

LIGIER: HOPEFUL

In the neighbouring motorhome on the other hand, there was a certain air of satisfaction. From the start of practice, Laffite professed himself happier with the car. At the end of the first session, he'd set third fastest time and was optimistic. *"My car's now almost as good as it was in South America,"* he explained. *"I set third fastest time with a gearbox that really wasn't very good, it kept jumping out of third and I had to hold it in. Furthermore, third is a gear we use a lot. Tomorrow I'm going to do even better, that's for sure."*

Gerard Ducarouge was chatty again. *"The work we've done has paid off. Our aerodynamic modifications* (side pod wings of different shape and length) *are in the right direction. Furthermore, we've done a lot of checking. We've made a lot of detail improvements, and we've rejigged the aerodynamics and checked things that might have moved. Tomorrow we'll be the fastest Ford-powered cars again, because Jacques lost a few tenths today because of his third gear."*

Guy Ligier entered the conversation. He was smiling again, despite toothache. *"That's racing,"* he said. *"You gain, you lose, and when you lose, you have to make up ground again. I think we're gaining again now."*

On Saturday Jacques Laffite did as he said he would, beating Jones's Friday time, but the Australian improved again on Saturday. Jacques was third fastest behind Jean-Pierre and Alan. But he was still smiling, he was faster than the Ferraris.

STRAIGHT FIGHT

Motor racing is sometimes very fair. Laffite's Ligier and Scheckter's Ferrari were directly opposed to one another during the race. It was the same at Silverstone where the two World Championship rivals ran together. Jacques was right behind Scheckter and then managed to get by before retiring. But the Frenchman held on to his advantage in the German Grand Prix. Scheckter tried to hang on to Laffite's Ligier but it was soon obvious that he couldn't stay in the slipstream and slowly he dropped back, finishing 13" behind the Ligier at the end. Laffite finished third and

Changing fortunes in the Ferrari and Ligier camps. Villeneuve may not be so happy now, but Laffite has found lost form.

Scheckter fourth, the Frenchman gained just a single point from his South African rival. Villeneuve was in fifth place for a long time but dropped out of the points with a pit stop.

There was an air of optimism in the French camp after the race. Ligier and his team congratulated Laffite as though he'd won. Whatever, they seemed to have become competitive again.

"The Williams are not unbeatable," said Jacques. *"It didn't take much to stay in front of Clay. But to win the championship, I've got to win races."*

Ducarouge went further. *"The car is now fairly competitive again. We've still more aerodynamic and mechanical improvements to make and we're going to try out these at Dijon. For that reason, I've cancelled our testing at Zeltweg. Consequently we've four or five days work at the workshop during which we can prepare two very competitive cars for Austria. The championship isn't finished yet."*

Next door, the place was nearly deserted. Forghieri, Scheckter and Villeneuve had already left for the airport in order to test at Zandvoort next day. Nevertheless, Marco Picinnini was there. Was the team happy with Scheckter's fourth place? *"Yes, it's quite a satisfying result, we cut down the damage."* He made a face at the same time, which looked more like a scowl than anything else. □

HOW THE GRID WAS WON

It wouldn't be exaggerating to say that Jean-Pierre Jabouille spent most practice very comfortably sitting... Jabouille spent most practice very comfortably sitting on a folding stool. In fact he proved that he didn't really have to do that many laps. He set his all-conquering time very early on in the first qualifying session. Jones and Laffite tried hard to bump him off pole position, but neither of them succeeded and Jean-Pierre was fastest in practice for the third time this season.

FRIDAY MORNING: JABOUILLE AND LAFFITE SHOW

At a quarter past ten on Friday morning, Jean-Pierre Jabouille's Renault pulled into the pits and stopped. The session hadn't been going longer than fifteen minutes, but it had been an intense fifteen minutes for the Renault driver. He'd set the fastest time and then spun in the stadium. Both skirts were broken and they weren't repaired before the end of the session.

The main surprise was Jacques Laffite's second fastest time. The Ligiers hadn't been so high up the grid since the Belgian Grand Prix.

The Williams came next, Regazzoni in front of Jones, but the latter didn't do many laps because of gearbox damage. Then came the two Brabhams, Watson's McLaren and the first of the Ferraris, that of Scheckter. Things weren't going well in the Ferrari camp.

FRIDAY AFTERNOON: JABOUILLE ENSURES POLE

It didn't take Jean-Pierre Jabouille long to set the fastest time of all. His car was quickly set up and then he benefited from two tows in succession. The result was that he set a time 2"" faster than the rest.

Jones reduced the gap to 1"5 later, but he set his time in the spare car after his race car had lost oil pressure. Laffite confirmed that things were going better for Ligier by taking the third quickest time, even though his gearbox was playing up. Arnoux, fourth quickest, was second at the start of the session but a loss of turbo boost meant that he couldn't defend his time later in the session. The Ferraris were a long way back. Villeneuve's engine went in his race car. The Italians aren't always happy. Pironi, on the other hand, was perfectly content. He'd set fifth fastest time. *"The Tyrrells are up quicker than everyone else."*

SATURDAY MORNING: SAME STORY

Jabouille-Jones-Laffite: that was the order after the first qualifying session, and it was the same on Saturday morning after the second free session. Jabouille was quickest, but had a few little problems. *The car understeered for a while, almost certainly because the skirts weren't working. And then I had a small problem with the brakes."*

Jones (who had his race car again) and Laffite set their times on softer race tyres. *"These tyres almost certainly wouldn't last a race,"* explained Gérard Ducarouge. Villeneuve was fourth fastest and that seemed to augur well for Ferrari. *"It's better than it was yesterday. We've modified both front and rear suspension, and I've changed a whole lot of little things."*

There were two surprises in fifth and sixth places in the session: Keke Rosberg and Patrick Tambay, rarely in such good positions. Tambay said he was delighted with his new M29. And it wasn't a very polite gesture to his teammate: he was 2/10ths quicker.

SATURDAY AFTERNOON: JONES AND LAFFITE TRY IN VAIN

Alan Jones and Jacques Laffite seemed determined to improve their times considerably during the second qualifying session after their problems the day before. They both improved, but not sufficiently to take pole position off Jabouille. Laffite unable to go faster than Jones who occupied the other front row position.

On the other hand, Piquet and Scheckter both did well to find another second each. The Brazilian made it onto the second row. However, he was deprived of his last set of qualifiers because Niki Lauda demanded them. But the Austrian couldn't do better than his teammate; he had to be happy with the fourth row beside Didier Pironi. The latter was disappointed: his race car's engine broke and he had to do his time in Geoff Lees's car.

Arnoux didn't go out at all. His engine broke in the morning and they couldn't change it in time. Jabouille only went out at the end of the session to check his brakes.

At the last minute, Rebaque grabbed the final grid position from Gaillard. □

Jean-Pierre Jabouille: straight down to a quick time which was never approached.

Nelson Piquet, still the faster Brabham driver. Niki Lauda is beginning to wonder...

The wheels rubbed against the uprights on Reutemann's spare Lotus. The mechanics had to do some filing.

THE FILM OF THE RACE

The battle for first place lasted for a little more than seven laps during which Jean-Pierre Jabouille caught Alan Jones. Then Jabouille left the road and couldn't restart. With him went the main interest in the race, leaving Jones alone at the front. Laffite inherited second place which Regazzoni quickly took over : from the 13 th of the 45 laps, it was clear that Williams were going to take a 1-2.

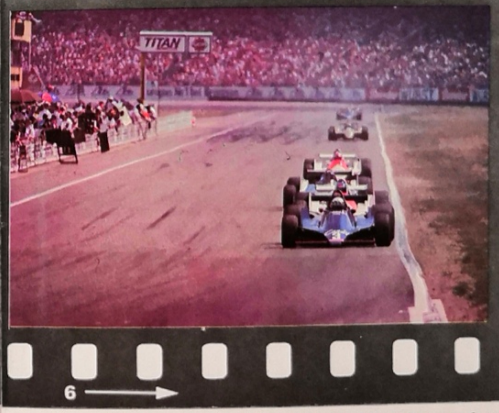
1. – Jabouille has been slow off the mark, Jones has the lead at the start with Laffite right behind him. The Ligier driver isn't in second for long...

2. – ... in fact it's Jabouille who comes by second the first time into the stadium in front of Laffite and Scheckter. The rest of the field led by Regazzoni are already some way back.

3. – Jones, Jabouille, Laffite. Scheckter, that's the order after the first lap.

4. – Regazzoni, Piquet, Lauda, Pironi, Andretti, Villeneuve and Arnoux, they're chasing the first four.

5. – The tail-enders are Rosberg, Lammers, De Angelis, Fittipaldi and Rebaque.



6. – Fourth lap: Didier Pironi is losing a lot of places thanks to a broken skirt. Tambay, Ickx and Watson will all get by him in a few laps.

7. – The leaders are already well out in front. Jabouille has to work hard to stay with Jones.

Jabouille, brakes locked on, leaves the track

Jones was the quickest off the line when the light turned green. Jabouille was a little slower, to such an extent that Laffite, starting behind him, succeeded in squeezing by into the first corner. Jabouille got his second place back before they came into the stadium for the first time : Jones in front of Jabouille. Laffite was in third in front of Scheckter, Regazzoni, Piquet, Lauda, Pironi, Andretti, Villeneuve, Arnoux, Tambay, Ickx, Watson, Reutemann, Mass, Lees, Lammers, Patrese, Rosberg, De Angelis, Rebaque and Fittipaldi. Stuck didn't even do one lap ; broken suspension. Jones and Jabouille were setting a scorching pace. At this rate, the leader must come from one of these two who were leaving their pursuers well behind. They pulled out a second a lap easily on Laffite who was in third during the first laps. The race looked like this : Jones leading Jabouille who was slowly pulling in the Williams. Behind them, third place was disputed by Laffite, Scheckter and Regazzoni. Then came a bunch comprising the Lauda and Piquet Brabhams, then Pironi, Andretti, Arnoux, Tambay, Villeneuve, Ickx and Watson. Reutemann followed them on the first lap but went off during the second, blaming Patrese who denied it after the race.

On the eighth lap, there were two main changes in the order. Jabouille had caught Jones and was right behind his rear wheels, but locked his brakes at the start of the hairpin in the stadium and went off into the sand where he remained stationary : the engine had stalled. *« I was really at the limit, trying as hard as I could in order to stay with Jones. I made a small mistake »*, he said after the race. So Jones went by in the lead with a seven second lead to Laffite who was having to put up with Scheckter's attempts to wrest second place from him. But Regazzoni was also trying hard and overtook the South African on the seventh lap. *« It wasn't very difficult »*, said Regga later. *« I was faster than Jody around the big curve at the end »*.

Jones was alone in the lead, and the battle now was that of Laffite and Regazzoni for second place. Scheckter tried hard to follow them, but he was a couple of lengths behind and that stopped him from really being involved. Laffite managed to hold the Williams driver for five laps. *« I couldn't really have a go at Jacques »*, said Regga *« He was a lot faster than I was in a straight line, and I could never catch him in order to overtake him under braking. My car's road-holding was better than his and I caught him in the corners, but then he'd leave me behind on the straights again »*.

Laffite was having trouble keeping the Williams behind him, and thought that the Williams was slightly better than the Ligier. It finished up when Laffite made a small mistake and Regga made full advantage of the fact and nipped by. It was on the 13 th lap in the second chicane.

Laffite tried hard to stay in the Williams's slipstream, but then he made a second mistake which lost him all contact four laps later. *« I half spun*

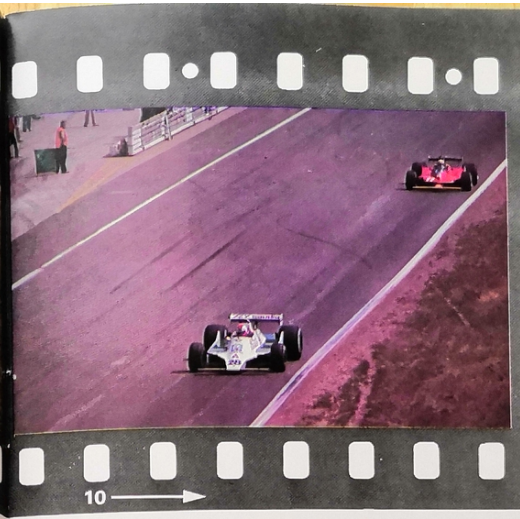
→

8 →

8. – Laffite, from the start of the race, is in third place in front of Scheckter, Regazzoni and the two Brabhams.

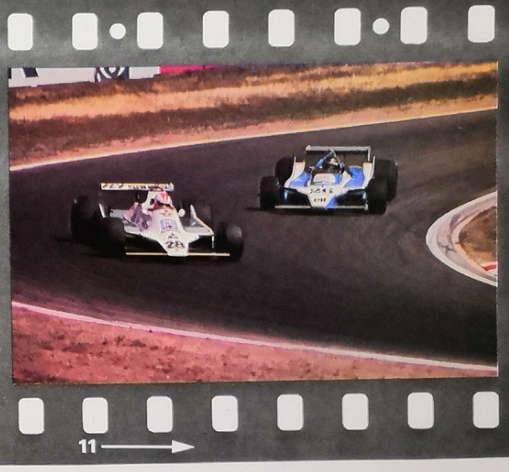
9 →

9. – It's all over for Jabouille. On the eighth lap he locks up his wheels and spins off into the dust. The engine stalls and he can't restart.



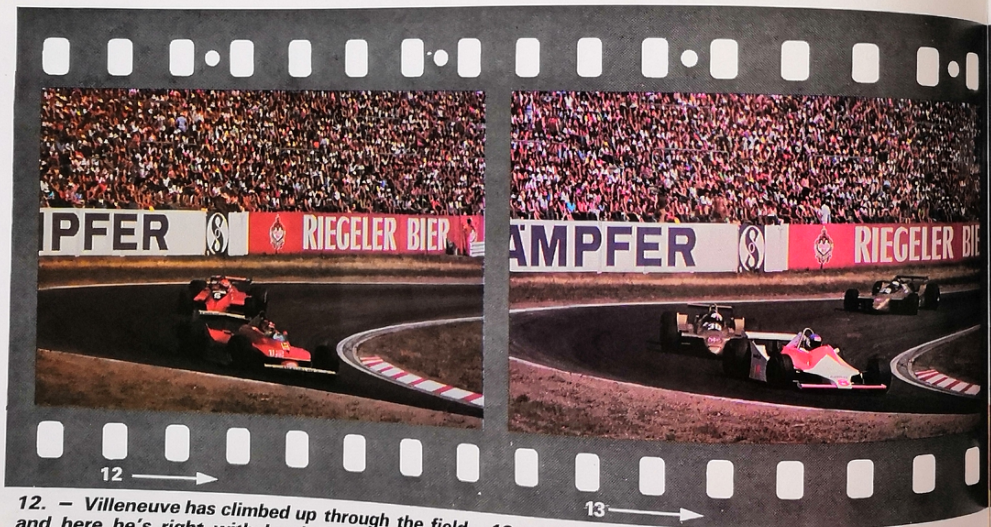
10 →

10. – Clay Regazzoni has started to move up. He's just passed Scheckter (eighth lap)...



11 →

11. – ... and five laps later, he takes second from Laffite.



12 →

12. – Villeneuve has climbed up through the field and here he's right with Lauda from whom he's about to take fifth place.

13 →

13. – Patrick Tambay has been slipping back thanks to engine trouble. The two Arrows catch him and overtake him on the 25th lap.

14 →

12. – It's a Williams double, but Alan Jones had trouble during the final laps with the deflated right rear tyre.

15 →

15. – Another "dry" rostrum: no Champagne, but Jones deserves the crown.

once again in the second chicane. Without Regga's tow, I couldn't follow him ». So Jacques had to be happy with maintaining a gap to his principal rival in the championship, Jody Scheckter who was now two seconds behind.

On the 15 th lap, one third distance, Jones was easily leading but was still taking a second a lap off his teammate, a solid second in front of Laffite and Scheckter. Thirty seconds behind the leader, Villeneuve had been in fifth place ever since the eight lap. He'd overtaken Tambay, Pirono, Arnoux, Andretti and Lauda.

The Austrian was in sixth place on that 15 th lap, leading a bunch : Ickx (another to come through the field well), Piquet, Watson, and Andretti who was beginning to have problems. Tambay was behind this group, already in engine trouble which was no reward for his good drive early on. He'd got up to ninth place, two places in front of his teammate before his engine started losing power as it wouldn't pull the revs.

Tambay was followed by Pironi. One of his skirts was missing and he was losing places. Catching him up were the Mass and Patrese Arrows, followed by Lees, Rosberg, the two Shadows swapping places, and finally Rebaque. Arnoux had retired on the tenth lap after one of this tyres had burst. From then on, the race became one of elimination. Ickx had a puncture on the 25 th lap which damaged his rear suspension, then a lap later Lauda's engine gave up, and Patrese also had a puncture on the right rear wheel.

Jones and Regazzoni : anything could happen

Piquet was the principal beneficiary of the Ickx and Lauda retirements, for he was now sixth which was to become fifth when Gilles Villeneuve stopped at his pit on the 37 th lap with the rear wing askew.

From half distance, the race became a procession. Scheckter couldn't do anything about Laffite who in turn had given up trying to catch the two Williams in front. But 15 laps from home, interest revived. Jone's engine started misfiring at high revs and more than that, his right rear tyre was going down. His margin of 22 s on the 32 cnd lap to Regazzoni was rapidly reduced. Four laps from the end, only seven and a half seconds seperated the Williams cars. Everything was possible : Regazzoni could perhaps cut the dificit. After his disappointment in the British Grand Prix, Jones could well have lost another win, but this time he hung on to win by three seconds from Regga who had by that time ceased to take advantage of his teammate's bad luck. Laffite and Scheckter naturally took third and fourth places. Fifth should have gone to Piquet, but the Brazilian was unlucky to have to pull of three laps from the end, stopped, like his teammate, by engine failure. So John Watson took fifth place in front of Mass who was one of the main beneficiaries of the numerous retirements. Geoff Lees drove at a steady pace in his first Grand Prix and finished seventh which satisfied Ken Tyrrell in particular. □

Jackie Oliver and Tony Southgate in front of a mock-up of the first real Arrows. Young and determined, they're still seeking the seal of success.

ARROWS: ANOTHER GAMBLE

It was a bit of a gamble when Jackie Oliver, Tony Southgate and Alan Rees decided to leave Shadow in 1977 to start Arrows. The three men wanted to do their own thing, to form a Formula One team themselves. And when they debuted their revolutionary new Arrows A2 at Dijon, they took their second gamble. If they win with the car, it will be a victory for the youth of the team, their aggressiveness and their boldness. Jackie Oliver was a former Formula One driver, and is a director of the team. It is he who tells the story.

by Eric BHAT.

Jackie Oliver is honest when talking about his own desire to form a Formula One team. *"I realised early in my career that my driving had its limits. It was a fruitful career, but I never won a Grand Prix and I felt a sort of frustration. Towards the end, I was sufficiently mature to realise that it wasn't just bad luck. I didn't really have all the necessary qualities to become a top driver. Motor racing had been my life, I first drove racing cars when I was 16, so I knew enough about it to know that I wasn't going to be World Champion. All the same, I wanted to win a Grand Prix, and if I couldn't do it as a driver, I wanted to do it as a team manager."*

THE SHADOW ALLIANCE...

That's how the idea of forming his own team came about. This idea had been in his mind for a long time, and was finally realised at the end of 1977 when Oliver founded Arrows. But Jackie didn't simply go out and form his own team. Within Shadow, Oliver quickly began to assume responsibility not just for driving, but also for managerial matters and organisation. It was a deliberate move. *"In this life"*, explains Oliver, *"you can't just decide to do something one day and do it the next. Firstly, you can't gain the necessary experience immediately. Secondly, you can't get respect from the people you want to work with when you're making mistakes and learning. There has to be a transition. So I knew that if I stopped racing in 1974, I wouldn't be managing my own team in 1975. I had to learn how to run a team before getting it together myself."*

Knowing that he wouldn't be a really top driver, Jackie Oliver nevertheless moved to the United States in 1971. *"My aim wasn't simply to drive"*, he says today, *"but to meet someone with whom I could be associated in a team. At that time, I didn't know that one day I would want my own team, but I wanted to get on in motor racing. I wanted to learn something other than driving, so that later, I would still be involved in racing. I met Don Nichols who was just starting CanAm racing and I joined up with him."*

Oliver drove in the Shadow CanAm team first of all, and then drove Formula One in 1973, but at the same time, he was learning about the art of running a team. *"I was the CanAm team manager, and was involved in Formula One organisation. I was in charge of the business side, relations with the sponsors and that sort of thing. Unconsciously, I was a lot more involved with organisation than I was with driving, and was only involved in organisation, in Formula One at least, from 1974. That was part of the process which would ultimately lead to forming my own team."*

...THEN THE DIVORCE

Today, Don Nichols probably realises that he created his own rival. Jackie Oliver has indeed formed his own team, for he took from Shadow not only Tony Southgate, Alan Rees, Dave Wass and many of the mechanics, but also copies of the drawings for Shadow DN9

→

«from race to race»

According to Oliver, it was an inevitable and logical ending. *"We had out disagreements. There had to be limits to my association with Shadow. Perhaps I was right, perhaps I was wrong. All that I knew was that our relationship had to come to an end, and it was an unhappy break-up. When you're talking of break-ups, whether it's in marriage, business or motor sport, 99 per cent are unhappy: there are always recriminations. Our's was no exception and it ended in court."*

Nichols didn't want to see in Grand Prix racing an Arrows that had been designed by Southgate while he was working for Shadow. He brought a court action, which Jackie Oliver explains thus: *"we'd decided to split up, and the main argument was as to who would keep the kids, and who would pay the maintenance"*.

Well, Nichols kept the kids as it were. And Arrows were the ones who had to pay. By court order, Arrows has to stop running their FA1-DN9s and to return to Shadow a load of parts. And Southgate had to sit down and design a real Arrows in a hurry.

The court order was certainly the worst moment in a difficult season in a number of ways. Formula One scarcely greeted them with open arms. The way in which Oliver, Southgate and Rees had left Nichols put other teams' teeth on edge, and they weren't about to welcome the new team into Formula One. *"It's true"*, says Oliver, *"Formula One people in general were somewhat upset at the way things turned out. They've got the right to their own opinions. There was also the fact that we were a young, agressive team who had started with virtually nothing. And that, sometimes, is not appreciated by society."* Riccardo Patrese was in a position to win the South African Grand Prix, but if he had succeeded, not everyone would have been happy.

RICCARDO'S BEHAVIOUR: EXCUSES

Riccardo Patrese's attitude did nothing to improve things. The young Italian was determined, perhaps too much so. The way in which he blocked Ronnie Peterson in the Swedish Grand Prix, and then, even worse, the Monza drama cast doubts about Riccardo, to such an extent that the Italian was barred from racing in the States at the end of the year. But Oliver has always been confident of his number one driver. *"The season was just as difficult for him. He's a young driver, and at a time when he should have been developing as a driver, he had a bad season. But he believes in us. He gets on well with Alan Rees. He may seem agressive, but within the team he seems to be blossoming, working with Alan who has tremendous experience in bringing on young drivers. Riccardo is now good enough to be a fine number one driver. We know that when we can give him a car capable of winning, he'll win."*

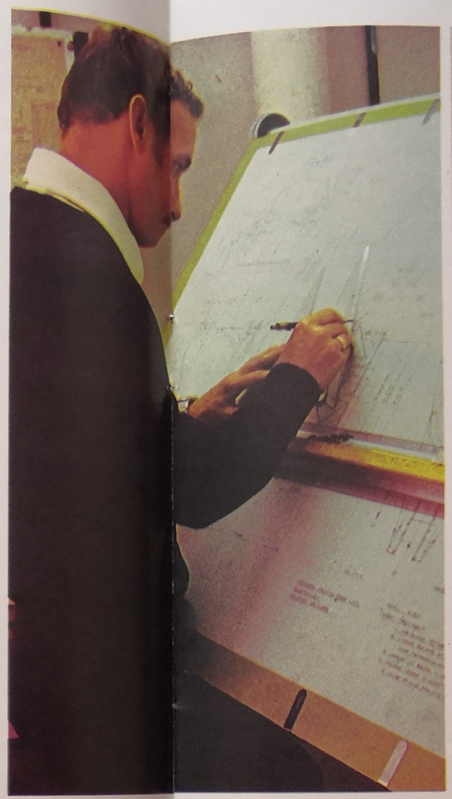
Even though they lost the court case with Shadow, even though they had problems making the hastily-built replacement car competitive, and in spite of Riccardo Patrese's problems the team got through their first year. In fact they started their second year in good spirits, thanks to the young determination of the team as a whole. At least, that's Oliver's explanation. *"When we started we were really hanging on by our finger-nails. It was a difficult time. Franco Ambrosio certainly helped us out on the financial side, but I had to put in some of my own money. We've all had confidence in the team, and we've come through that difficult period thanks to our collective determination. Tony Southgate, Alan Rees and I founded Arrows because we believed that jointly our personalities were complimentary. At Shadow I could see that our respective talents combined to be fruitful. By working together, and not against one another as we were at Shadow, each person's ability could be used to the full, and this should reap its rewards. We didn't win a Grand Prix last year, but our knowledge and determination helped us deal with the many difficulties we had."*

SOUTHGATE'S BOLDNESS

Despite their lack of racing, the Arrows team headed by their experienced directors, proved that they were a serious team. Two cars were entered in Grands Prix throughout the season, once Rolf Stommelen had been called in to replace the unfortunate Gunnar Nilsson.

Their determination now is as great as ever. They proved to have succeeded in running reliably. All they need now are results. The potential of the new Arrows A2 however is still unknown. Southgate's new design is not along Chapman lines. Even so, the Arrows A2 is just as sophisticated in its technical innovation. According to Jackie Oliver, they've taken a calculated risk. *"Tony, Alan and I talked about it for a long time. We had two roads open to us: One was to copy a car that was among the most competitive, as Tyrrell, Ligier and Williams have done—although the latter two to a lesser degree. Or we could build a car with original thinking involved, learnt from development work, test sessions and wind tunnel studies. We didn't chose the former, if we had done so, we would have been at the same stage as everyone else. So we chose the second, and if that works, we'll be ahead of the rest. We've gambled. We've had to do it all by ourselves, we couldn't copy other cars. Of course, it's taken us a lot longer, but it could pay off."*

Jackie Oliver has left his driving days behing. His new job takes up all his time. *"It's a lot more difficult to be a team manager than a driver"*, he reckons. *"You have to take many things into account. You have to concentrate all the time. A driver has to concentrate very hard when he's driving, but then he's off: Monday, Tuesday and Wednesday are for relaxing. Many people thing they can be a team manager, but in the end, it's complicated."* He things he's capable of doing a good job, but not in excessive proportions. *"If I can do a tenth of what they've done at Lotus, I shall be the happiest of men."* □



Dave Wass, Tony Southgate's assistant: another ex-Shadow man.

Jackie Oliver: "to succeed in doing a tenth of what Lotus have done..."

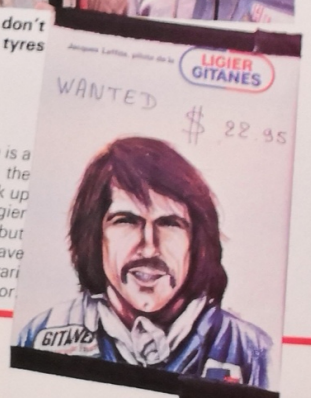
The Arrows workshop at ice-cream time. The two Arrows A2 were on the road for Silverstone an hour later.

Lucky policemen drive Porsches, and they do a good job. There were few traffic jams outside the circuit.

The talent in the paddock was better than ever in Germany.

Harald Ertl may no longer be a Formula One driver, but he's still a journalist. Last year he only just failed to get a World Championship point in the Ensign.

Who said that don't what all those tyres are doing?



Jacques Laffite is a wanted man, the poster was stuck up on the Ligier motorhome, but maybe it should have been on the Ferrari caravan next door.

HOCKENHEIM IN PICTURES

1 - 2 — The good old Ford-Cosworth. Last year it was the Lotus that brought home its results, this year it's the Williams.

3 — Emerson Fittipaldi's Copersucar F6 appeared in considerably modified form but there was no positive result.

4 — What progress Renault have made in a year.

5 — A puncture caused Riccardo Patrese's retirement

6 — McLaren M29 wheel bearing

7 — Jody Scheckter drove a prudent race on a circuit that hardly favoured the Ferrari T4.

8 — Jones was in front from the start, Laffite tried to stay in front of Jabouille

9 — The first five into the stadium : Jones, Jabouille, Laffite, Scheckter and Regazzoni.

10 — Jacky Ickx got a tow from Jacques Laffite during practice and set his fastest time.

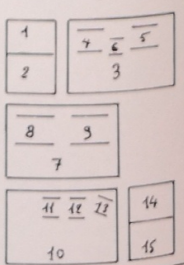
11 — Geoff Lees's first Grand Prix.

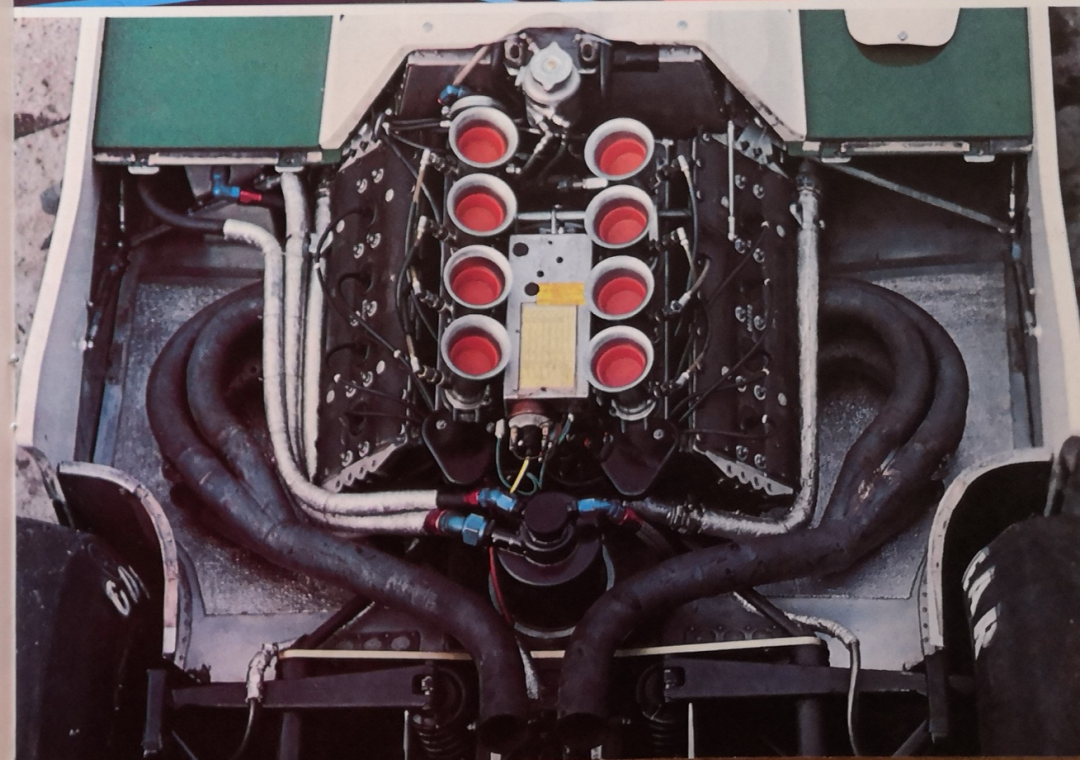
12 — Jean-Pierre Jabouille was on pole position, but he made a small mistake in the race

13 — Nelson Piquet so nearly took his first World Championship points

14 — Jochen Mass took sixth place : the first point won by the new Arrows

15 — There's breath of fresh air in the Mc Laren team since the M29 appeared. Waston, Tambay and Alistair Calwell have renewed hope.





GOODYEAR
14
E. Fittipaldi
COPERSUCAR
SKF
FORD

DUNLOP
TITAN
WURST
Eternit
Möbel-Fam
FIAT
Jody Scheckter
11
Agip
MAGNETI MARELLI
AUTO BECKER
speedline
SKF
arexons
brembo
CHAMPION
FERODO

LOP
elf elf elf
LIGIER
26
elf
Candy
Tyrrell
Team
CHAMPION
Candy
Tyrrell
Team
RASTEMP
parr
DSON
nalat
LIGIER
25
elf

She's been around the paddock getting herself photographed with each driver. And attracted a lot of attention.

You'd almost pray for rain if you had an umbrella and those two were walking by. Hans Stuck doesn't need rain.

Reception areas are more and more original. This is Regie Renault's UFO at Hockenheim, where Renault also had a round of their European Renault 5 championship.

Some are more equal than others in the Brabham pit. Working journalists are thrown out, but hangers-on are allowed in.

Jan Lammers jokes even when he's asleep. He may be having his siesta but Jan is as amusing as ever.

Two alternate forms of transport in the land of Mercedes, BMWs and Porches.

Wilson Fittipaldi and MV Augusta: a moment of relaxation during a difficult weekend in the Copersucar camp.

Three Procar wins for Niki Lauda. It brings some consolation for his lack of Formula One form, and a load of dollars.

INTERVIEW

LAFFITE : « WINNING, THAT'S SOMETHING ELSE »

The wins in South America did nothing to change Jacques Laffite. He was the same fellow : a happy hell-raiser loving life. Then came the slim period for Ligier : the Ferraris got on top in South Africa and at Long Beach. Even though Ligier bounced back a little, Laffite was a little less self-assured. By getting over this little personal crisis, Jacques has won his third victory of the season. He's taken Ligier's second crisis period since the French Grand Prix in a calm way. He may have lost the World Championship, but he's mature enough to realise that he'll win it one day.

by Eric Bhat

Guy Ligier was very upset in Dijon, do you think he was right ?
No, not at all, he was very wrong. He was creating a stink over nothing. The car didn't work, that's all there was to it. But it wasn't Ducarouge's fault, nor the team's. They'd all worked really hard between the Monaco and French Grands Prix. I'd done six whole days of testing. On the Saturday the week before the Grand Prix I set competitive times. And them we couldn't get near them. There was no point in getting upset. But I know Guy. If he gets annoyed, it's because he's even more disappointed than we are ; it's forgotten the next day. I know his temperament.

Neither Patrick nor yourself won at Zolder nor at Monaco, but the cars went well. Since then, you haven't been at the head of the field. What's happened ?
They said we were finished after Long Beach. But Patrick won at Jarama, and we might have won again both at Zolder and Monaco where the cars were faster than the Ferraris. So what happened between Monaco and Dijon ? That's one of those little mysteries in racing. There's something wrong, possible nothing very big. Personnaly I think it's an aerodynamic problem. We've got to find out what's wrong though, all is not lost.

Do you think that the team are floundering at the moment ?
No, no, we're not floundering at all. Let's say that to try and win the World Championship is a tremendous

→

task, and it might aven be too big for a little team like ours. If we want to do four days testing between two Grands Prix, it imposes an enormous load on the work force, because the cars have to be maintained at the same time. The mechanics are the same at races and for testing. They do a lot of work. Perhaps they've done rather too much since Monaco, that may be true. But they shouldn't be held responsible.

Do you mean to say that you've done too much in a bad se ?
Not wholly in a bad sense. We tried a lot of different things. I don't think we had enough feedback in order to analyse the results, because I was always leaving one circuit in order to go straight to another. May be we got rather tiee up trying to do too much.

But despite this, do you think that you still have a chance of winning the World Championship ?
Yes, they're about the same as after Monaco, that's a 40 per cent chance for me, and a 60 per cent for Scheckter. I don't see that anyone can catch us except Villeneuve perhaps.

Has the atmosphere changed within the team ? You started the team in a magnificant and encouraging way. Have the recent disappointments affected the team as a whole ?
No, but I do believe that everyone is almost trying to do too much. I do my best, the mechanics seem to do better. We've got to work now as we worked before, that's to say, normally. At the moment it's hard to maintain a rhythm. There's no point in trying too hard, and then doubling the work, and then trebling it : that's just making more work, more worry, too much anxiety. It's better to be calm and that's how you win races.

This is the first year that you've been in a position to win the World Championship. Does this fact impose more strain ?
Yes, naturally. It's a particularly difficult situation, it's just that it's one that's new and one which we're not prepared for. I'm learning ! I'm more prepared to be World Champion this year than I was last. But if I'm World Champion at the end of the year, it will be more thanks to luck. I don't deserve it this year really. And in terms of a driver, I'm not really ready to be World Champion. It's a little too soon perhaps. This year, Scheckter is the man who is destined to be World Champion, and I think he should be. Certainly I'm still in there with a chance for the World Championship thanks to my early season results, but it's going to be difficult for me.

What do you think you're lacking ?
Maturity, the actual awareness than I could be World Champion. I didn't think about it before, so perhaps it's come my way rather too quickly.

Even after four seasons in Formula One ?
Yes. You get that kind of experience on the track when you're at the front, not when you've set 15th fastest time. When you're 15th, you're learning about technicalities, circuits and-how the team works. But you don't think either during or between races that you could be World Champion. You must know how to rest and to recuperate. That's the sort of thing you teach yourself. I'm very happy to be learning them, because that way I'm a better driver.

But what if you never find another car with the potential of winning the World Championship for you, won't you have missed the boat ?
Not at all. I've never missed an opportunity in my life. Whenever something's come up. I've always seized it. I believe that I'll be World Champion one day. This year it was somewhat unexpected. I'm going to fight all the way. But I'm sure that I'll have another opportunity in the years to come.

Listening to you talk, I've the feeling that you've almost resigned this year. Don't you think you're going to win ?
I think I'm going to win, but only 40 per cent of me thinks that. I can't really believe that I'm going to win. I think it's a really difficult thing to win, especially since Patrick's accident. I wasn't really ready for the job. When Patrick was in the team, I relied on him. Now I'm all alone. If I'd been alone at the beginning of the season, I would have thought differently.

You relied on him, even though he was a competitor.
Yes, it was important to count on him. I knew he was there. If I didn't win, the team could always win with him. That's what happened at Madrid. Now that Patrick isn't in the team any longer, I have to take the lead of the series again knowing that the team's chances in the series rest solely on me. I've got to get used to that fact again. I'm not a pessimist, but I think that it will be very difficult for us to win the World Championship this year. It's too big a gamble to say that I'm going to win this year... so I don't say it.

It must be the first time in your career that you've said : I'm not going to win.
Yes, but Formula One is something different. There are too many factors involved. The more you think that you can overcome those factors, the more one realises how difficult they are to overcome. I don't think that we can overcome them all. I would like to be able to say one day : tomorrow I'll win. But for the moment, that's impossible. My car isn't capable of winning, but I think I am. Actually winning Grands Prix may tire the mind. Even though one may be in complete possession of one's faculties, one

→

The Laffites and Jabouilles on holiday at Cabourg: sport is primary.

Jacques at the controls of a kite.

An enthusiastic teacher, an attentive pupil: Laffite tries to teach his brother-in-law some of the finer points of golf.

«from race to race»

might lose a certain something without knowing it every time one wins a Grand Prix. I probably set up my car badly for Dijon and Silverstone, quite simply for reasons that I'm ignoring and which I'll analyse one day. I'll know the reason in two months, maybe one month or in eight days.

You've never been so well placed in the championship. Has this been your best season ever, or even your worst ?

It's certainly my best season because I've had the best results. Having said that, and that I count this season as good on the competitive side too, I find it worse in terms of publicity. The more well known you are, the more pressure here is on your freedom. I'm learning a new job really. The people who just come up to you, The people you meet in the street, all that really inconveniences you as much as anything else. I's not easy to resist to pressures. But that's something I'm learning about now. It's tremendous : it's moulding me into a World Champion. And that may be for this year, next year, or even two year's time. But I'll be ready. If the occasion presents itself, I shall be absolutely ready.

Was your early success and the potential of being World Champion weighing heavily ?

I found it apressure at the time, but now it's better. I had a difficult time between Long Beach and Zolder. Since Zolder, things have been OK. I'm clearer, more lucid. I learn't what was wrong and that's cleared up a misunderstanding within myself. I've been feeling a lot better in myself since Zolder.

How did you intend to start the second half of the season ?

Attacking. And winning as many races as possible if the car was capable of it. And at least, I wanted to match my races with Scheckter's. But I really hope to win some more races. It's going to be harder and harder with the Williams and Renaults up there. But I'm easy about it. And the team has shown itself to be a really good team. I've proved that I'm a race winner. All I say to myself is that I won't be World Champion. That way I'm calmer, I've more peace of mind.

Do you think that in saying « I won't be World Champion » you can still rustle up the enthusiasm to try and become champion ?

I have that enthusiasm, all the time. I test for days on end. I do everything I can to win the series. I understand the Championship system. I accept the basic idea that I have to be a long way from home all the time to do tyre testing. I'm used to all the pressures. But winning the World Championship isn't nearly as pre-occupying now as it was at the start of the season, which after all is normal when you win two races in a row. I could have said, OK, I'm going to win them all. Instead I've learnt that I won't win them all. □

An afternoon with Laffite : out of breath

« The boys are playing tennis, », Bernadette Laffite speaking of her husband and brother-in-law. Jacques and Jean-Pierre are already into a busy afternoon, like those that they've enjoyed so many times before. This day they're staying in a villa at Cabourg in Normandy that they've rented for July.

Anyone else but Jean-Pierre would have a hard time following Jacques. He simply doesn't stop all day. He lives for the day, and uses every minute of that day.

Tennis is followed by a hurried lunch, and then it's down to the beach for a quickrunwith Bernadette and the Jabouille couple. Is that a kid playing with a kite ? It tempts Jacques. The child is approached, the controls pass to the Ligier driver. He quickly learns how to handle the strings. The red plastic bit at the end, calm and well handled until the the hands of its young owner, starts to spin boldly, its long tail brushing Bernadette and Genevieve, the sisters, who react with horror as the kite dives down on them... when Jean-Pierre isn't the target.

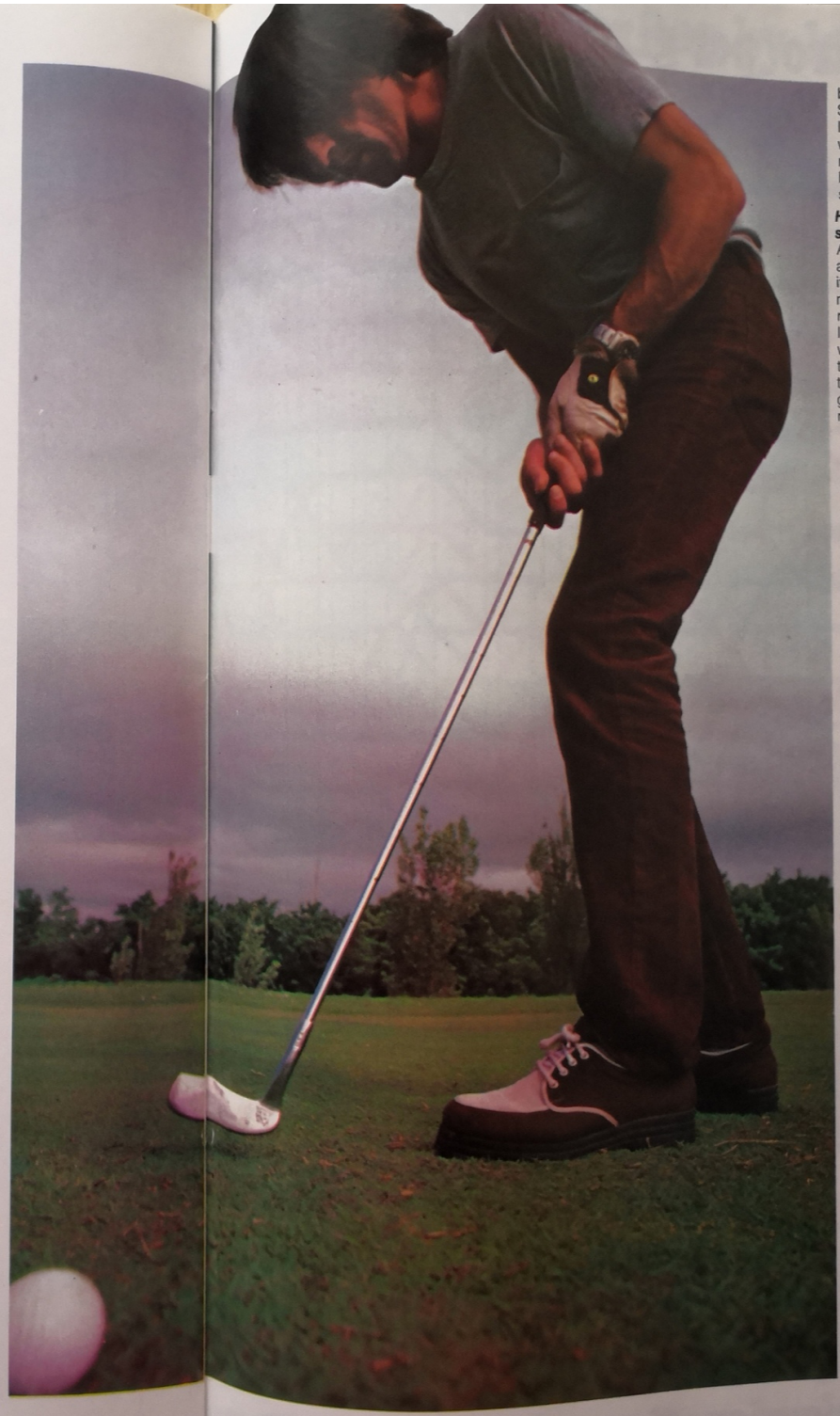
Back to the villa. A phone call from Vichy to organise the travel arrangements for the next Grand Prix, and then the two drivers are off to play golf. Miles of walking from one hole to the next. Jean-Pierre scowls. He's only starting to play and his mistakes upset him. *« It's not too good, »* he says, *« my sides have been aching since Dijon. »* And again, *« I messed up that shot because Bernard* (our photographer) *was behind me. »* But Jacques ignores his complaints, and continues to advise his brother-in-law with patience and enthusiasm.

At the end of the course they meet the two girls : bows all round, real gentlemen these brothers-in-law. Jacques tries to show them how good he is. He concentrates, swings and puts the ball at least a yard from the hole... from a distance of a least a hundred yards, and then it was in a bunker. Quite an achievement *« Good... »* said Jacques satisfied. The ladies don't return. After they've gone, Jacques laughs. *« I've never hit such a good shot, and I've only been playing a year. They're going to be saying : what an ace Laffite is. »* He's prouder of the thought of it than the shot itself It's six 'o' clock. The afternoon is still young. Riding or tennis ? They could always go the tennis court on horse-back. Tea-time, change and theoretically off to tennis. But where's Jacques. He's gone down to the beach with Camille, his daughter who is still learning to walk. And as his tea-cup is in the way, Jacques leaves it on the gate. And the first one to go out after him, Jean-Pierre opens the gate and breaks the cup. *« That's typical Jacques, »* says Jean-Pierre, half-annoyed and yet half-amused at his brother-in-law's carelessness.

And now here are Jean-Pierre and Jacques once again against one another, on a court this time, each teamed up with a nephew. While hitting the ball well, Jacques doesn't stop talking, commentating on the match, advising his young partner, congratulating him or encouraging him to follow the ball.

They leave the court to do an interview in a tape recorder, in the shadow of a tree ; Jacque's cool and alert. And there they go again for another set. We weren't there the next day to see for ourselves, but the programme for the day was certain to be as busy. Jacques never tires.

The art of mixing physical exercise with concentration, and equally the art of living a balanced life. Jacques plays golf and tennis again now after a brief rest. "I stopped in order to let my wrist get better, but I feel better when I'm living a healthy and active life without restrictions."



JABOUILLE 1
JONES 2
LAFFITE 3
PIQUET 4
SCHECKTER 5
REGAZZONI 6
LAUDA 7
PIRONI 8
VILLENEUVE 9
ARNOUX 10
ANDRETTI 11
WATSON 12
REUTEMANN 13
ICKX 14
TAMBAY 15
LEES 16
ROSBERG 17
MASS 18
PATRESE 19
LAMMERS 20
DE ANGELIS 21
FITTIPALDI 22
STUCK 23
REBAQUE 24
1 2 3 4 5 6 7 8 9 10 11 13 15
19 21 23 25 27 29 31 33 35 37 39 41 43 45
1 2 3 4 5 12 6 7 8 9 10 11
THEODORE RACING
22

Hockenheim statistics

GERMAN GRAND PRIX

Date: July 29, 1979
Circuit lenght: 4 219 miles
Distance: 45 laps, 189 766 miles
Conditions: hot and sunny
Attendance: 100.000 spectators

THE RECORD

last five races

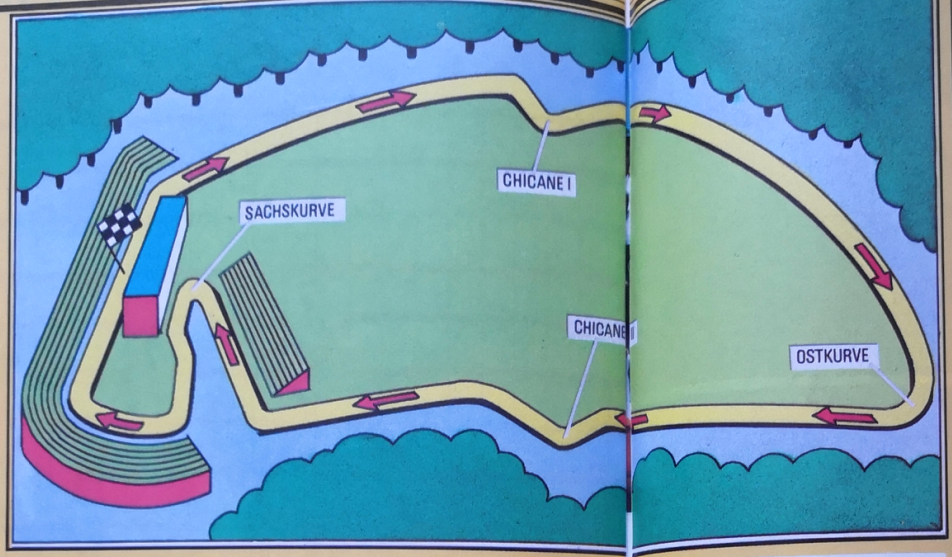
1974: Regazzoni (Ferrari)
1975: Reutemann (Brabham)
1976: Hunt (McLaren)
1977: Lauda (Ferrari)
1978: Andretti (Lotus)

STARTING GRID

JABOUILLE Renault RS 11 1'48"48	**JONES** Williams FW07 1'48"75
LAFFITE Ligier JS 11 1'49"43	**PIQUET** Brabham Alfa BT 48 1'49"50
SCHECKTER Ferrari 312 T4 1'50"00	**REGAZZONI** Williams FW07 1'50"12
LAUDA Brabham Alfa BT 48 1'50"37	**PIRONI** Tyrrell 009 1'50"40
VILLENEUVE Ferrari 312 T4 1'50"41	**ARNOUX** Renault RS 12 1'50"48
ANDRETTI Lotus 79 1'50"68	**WATSON** McLaren M 29 1'50"86
REUTEMANN Lotus 79 1'50"94	**ICKX** Ligier JS 11 1'51"07
TAMBAY McLaren M29 1'51"47	**LEES** Tyrrell 009 1'51"50
ROSBERG Wolf WR8 1'52"01	**MASS** Arrows A 2 1'52"74
PATRESE Arrows A2 1'52"93	**LAMMERS** Shadow DN9 B 1'53"59
DE ANGELIS Shadow DN 9 B 1'53"73	**FITTIPALDI** Copersucar F6 1'54"01
STÜCK ATS D1/003 1'54"47	**REBAQUE** Lotus 79 1'55"86

NON QUALIFIED:

GAILLARD (ENSIGN MN 179) 1'55"95 and MERZARIO (MERZARIO A/4) 2'01"84.

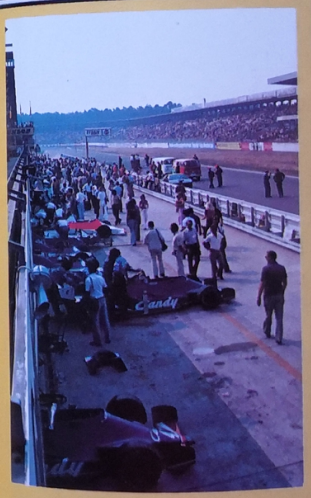


UNOFFICIAL PRACTICE TIMES

	Friday morning	Saturday morning	Sunday morning
JABOUILLE	1'50"45	1'49"57	1'51"55
JONES	1'51"49	1'49"77	1'51"62
LAFFITE	1'50"94	1'50"44	1'53"10
PIQUET	1'51"70	1'53"19	–
SCHECKTER	1'52"25	1'52"61	1'53"36
REGAZZONI	1'51"27	1'52"87	1'51"24
LAUDA	1'51"64	1'54"10	1'54"17
PIRONI	1'52"30	1'53"32	1'53"04
VILLENEUVE	1'54"12	1'51"31	1'52"73
ARNOUX	1'53"13	1'54"02	1'52"52
ANDRETTI	1'54"01	1'52"68	1'53"96
WATSON	1'51"89	1'52"51	1'54"73
REUTEMANN	1'53"38	1'55"00	1'57"88
ICKX	1'54"94	1'53"28	1'59"07
TAMBAY	–	1'52"33	1'54"77
LEES	1'54"99	–	1'55"61
ROSBERG	–	1'52"20	–
MASS	1'53"50	1'53"08	1'53"57
PATRESE	1'55"10	1'53"35	1'55"39
LAMMERS	1'59"10	1'54"29	1'57"97
DE ANGELIS	–	1'53"74	1'57"12
FITTIPALDI	1'56"30	1'54"48	1'58"04
STÜCK	1'56"26	–	–
REBAQUE	1'56"10	1'54"53	1'59"64
GAILLARD	1'56"82	–	–
MERZARIO	–	–	–

OFFICIAL PRACTICE TIME

	1st session	2cnd session
JABOUILLE	1'48"48	1'49"75
JONES	1'49"94	1'48"75
LAFFITE	1'50"26	1'49"43
PIQUET	1'50"90	1'49"50
SCHECKTER	1'50"93	1'50"00
REGAZZONI	1'50"76	1'50"12
LAUDA	1'50"70	1'50"37
PIRONI	1'50"66	1'50"40
VILLENEUVE	1'51"18	1'50"41
ARNOUX	1'50"48	–
ANDRETTI	1'51"50	1'50"68
WATSON	1'51"17	1'50"86
REUTEMANN	1'50"94	2'07"67
ICKX	1'54"10	1'51"07
TAMBAY	1'52"93	1'51"47
LEES	1'54"12	1'51"50
ROSBERG	1'53"83	1'52"01
MASS	1'52"74	1'53"18
PATRESE	1'54"31	1'52"93
LAMMERS	1'56"02	1'53"59
DE ANGELIS	1'54"86	1'53"73
FITTIPALDI	1'54"01	1'54"14
STUCK	1'56"58	1'54"47
REBAQUE	1'56"25	1'55"86
GAILLARD	1'57"06	1'55"95
MERZARIO	–	2'01"84



THEIR FASTEST LAPS

JONES	1'51"97	(15th lap)
REGAZZONI	1'52"01	(38th lap)
LAFFITE	1'52"34	(34th lap)
SCHECKTER	1'52"48	(9th lap)
WATSON	1'53"83	(16th lap)
MASS	1'54"61	(34th lap)
LEES	1'54"80	(41th lap)
VILLENEUVE	1'51"89	(40th lap)
PIRONI	1'54"56	(8th lap)
LAMMERS	1'56"37	(38th lap)
DE ANGELIS	1'56"51	(13th lap)
PIQUET	1'52"72	(35th lap)

PIT STOPS AND RETIREMENTS

Stuck: retired 1st lap, suspension broken
Reutemann: retired 2cnd lap, accident
Fittipaldi: retired 4th lap, engine
Jabouille: retired 8th lap, spun and stalled
Arnoux: retired 16th lap, puncture
Andretti: retired 17th lap, broken driveshaft
Rebaque: stops on 14th, 19th laps, retired 22cnd lap, engine
Pironi: stopped 16th lap, check front track, change front tyres
Ickx: retired 25th lap, puncture, rear suspension damage
Lauda: retired 28th lap, engine
Rosberg: retired 30th lap, engine
Tambay: retired 30th lap, engine
Patrese: retired 35th lap, puncture
Villeneuve: stopped 36th lap, changed tyres and rear wing
Piquet: retired 43rd lap, engine

PROVISIONAL WORLD CHAMPIONSHIP CLASSIFICATION

(after the Argentine, Brazilian, South African, USA West, Spanish, Belgian, Monaco, French, British and German GPs).

1. Scheckter 35 pts. **2.** Laffite 28 pts. **3.** Villeneuve 26 pts. **4.** Regazzoni 22 pts. **5.** Depailler and Reutemann 20 pts. **7.** Jones 16 pts. **8.** Jarier and Watson 13 pts. **10.** Andretti 12 pts. **11.** Arnoux 10 pts. **12.** Jabouille 9 pts. **13.** Pironi 8 pts. **14.** Patrese and Mass 2 pts. **16.** Fittipaldi, Lauda and Ickx, 1 pt.

CONSTRUCTORS CUP

1. Ferrari 65 pts. **2.** Ligier 51 pts. **3.** Williams 38 pts. **4.** Lotus 37 pts. **5.** Tyrrell 21 pts. **6.** Renault 19 pts. **7.** McLaren 13 pts. **8.** Arrows 4 pts. **9.** Copersucar and Brabham 1 pt.

RESULTS

1. Jones	Williams FW07	1 h 24'48"83, 134.273 mph
2. Regazzoni	Williams FW07	2"91 behind
3. Laffite	Ligier JS 11	18"39 behind
4. Scheckter	Ferrari 312 T4	31"20 behind
5. Watson	McLaren M 29	1'37"80 behind
6. Mass	Arrows A2	one lap behind
7. Lees	Tyrrell 009	one lap behind
8. Villeneuve	Ferrari 312 T4	one lap behind
9. Pironi	Tyrrell 009	one lap behind
10. Lammers	Shadow DN 9B	one lap behind
11. De Angelis	Shadow DN 9B	two laps behind
12. Piquet	Brabham BT 48	three laps behind

Fastest lap: Villeneuve, 1'51"89, 135.707 mph, record

subscription coupon
to be cut our or copied

Name .....

Christian name .....

Address .....

I wish to subscribe for one year: £12
I enclose my remittance by cheque ☐ or money order
☐ to:

SNEP - Service Abonnements
7, rue de Lille, 75007 Paris - France
Foreign subscription rates on request

Hockenheim statistics

GERMAN GRAND PRIX

Date: July 29, 1979
Circuit lenght: 4 219 miles
Distance: 45 laps, 189 766 miles
Conditions: hot and sunny
Attendance: 100.000 spectators

THE RECORD

last five races

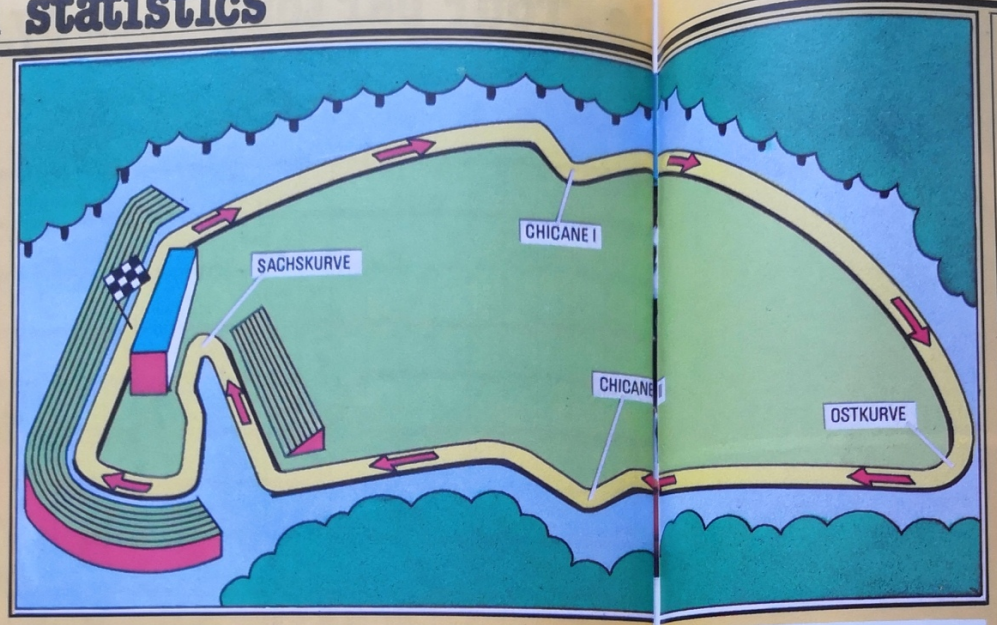
1974: Regazzoni (Ferrari)
1975: Reutemann (Brabham)
1976: Hunt (McLaren)
1977: Lauda (Ferrari)
1978: Andretti (Lotus)

STARTING GRID

JABOUILLE Renault RS 11 1'48"48	**JONES** Williams FW07 1'48"75
LAFFITE Ligier JS 11 1'49"43	**PIQUET** Brabham Alfa BT 48 1'49"50
SCHECKTER Ferrari 312 T4 1'50"00	**REGAZZONI** Williams FW07 1'50"12
LAUDA Brabham Alfa BT 48 1'50"37	**PIRONI** Tyrrell 009 1'50"40
VILLENEUVE Ferrari 312 T4 1'50"41	**ARNOUX** Renault RS 12 1'50"48
ANDRETTI Lotus 79 1'50"68	**WATSON** McLaren M 29 1'50"86
REUTEMANN Lotus 79 1'50"94	**ICKX** Ligier JS 11 1'51"07
TAMBAY McLaren M29 1'51"47	**LEES** Tyrrell 009 1'51"50
ROSBERG Wolf WR8 1'52"01	**MASS** Arrows A 2 1'52"74
PATRESE Arrows A2 1'52"93	**LAMMERS** Shadow DN9 B 1'53"59
DE ANGELIS Shadow DN 9 B 1'53"73	**FITTIPALDI** Copersucar F6 1'54"01
STÜCK ATS D1/003 1'54"47	**REBAQUE** Lotus 79 1'55"86

NON QUALIFIED:

GAILLARD (ENSIGN MN 179) 1'55"95 and MERZARIO (MERZARIO A/4) 2'01'84.

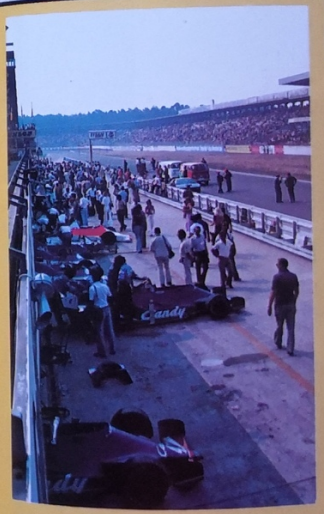


UNOFFICIAL PRACTICE TIMES

	Friday morning	Saturday morning	Sunday morning
JABOUILLE	1'50"45	1'49"57	1'51"55
JONES	1'51"49	1'49"77	1'51"62
LAFFITE	1'50"94	1'50"44	1'53"10
PIQUET	1'51"70	1'53"19	–
SCHECKTER	1'52"25	1'52"61	1'53"36
REGAZZONI	1'51"27	1'52"87	1'51"24
LAUDA	1'51"64	1'54"10	1'54"17
PIRONI	1'52"30	1'53"32	1'53"04
VILLENEUVE	1'54"12	1'51"31	1'52"73
ARNOUX	1'53"13	1'54"02	1'52"52
ANDRETTI	1'54"01	1'52"68	1'53"96
WATSON	1'51"89	1'52"51	1'54"73
REUTEMANN	1'53"38	1'55"00	1'57"88
ICKX	1'54"94	1'53"28	1'59"07
TAMBAY	–	1'52"33	1'54"77
LEES	1'54"99	–	1'55"61
ROSBERG	–	1'52"20	–
MASS	1'53"50	1'53"08	1'53"57
PATRESE	1'55"10	1'53"35	1'55"39
LAMMERS	1'59"10	1'54"29	1'57"97
DE ANGELIS	–	1'53"74	1'57"12
FITTIPALDI	1'56"30	1'54"48	1'58"04
STÜCK	1'56"26	–	–
REBAQUE	1'56"10	1'54"53	1'59"64
GAILLARD	1'56"82	–	–
MERZARIO	–	–	–

OFFICIAL PRACTICE TIME

	1st session	2cnd session
JABOUILLE	1'48"48	1'49"75
JONES	1'49"94	1'48"75
LAFFITE	1'50"26	1'49"43
PIQUET	1'50"90	1'49"50
SCHECKTER	1'50"93	1'50"00
REGAZZONI	1'50"76	1'50"12
LAUDA	1'50"70	1'50"37
PIRONI	1'50"66	1'50"40
VILLENEUVE	1'51"18	1'50"41
ARNOUX	1'50"48	–
ANDRETTI	1'51"50	1'50"68
WATSON	1'51"17	1'50"86
REUTEMANN	1'50"94	2'07"67
ICKX	1'54"10	1'51"07
TAMBAY	1'52"93	1'51"47
LEES	1'54"12	1'51"50
ROSBERG	1'53"83	1'52"01
MASS	1'52"74	1'53"18
PATRESE	1'54"31	1'52"93
LAMMERS	1'56"02	1'53"59
DE ANGELIS	1'54"86	1'53"73
FITTIPALDI	1'54"01	1'54"14
STUCK	1'56"58	1'54"47
REBAQUE	1'56"25	1'55"86
GAILLARD	1'57"06	1'55"95
MERZARIO	–	2'01"84



THEIR FASTEST LAPS

JONES	1'51"97	(15th lap)
REGAZZONI	1'52"01	(38th lap)
LAFFITE	1'52"34	(34th lap)
SCHECKTER	1'52"48	(9th lap)
WATSON	1'53"83	(16th lap)
MASS	1'54"61	(34th lap)
LEES	1'54"80	(41th lap)
VILLENEUVE	1'51"89	(40th lap)
PIRONI	1'54"56	(8th lap)
LAMMERS	1'56"37	(38th lap)
DE ANGELIS	1'56"51	(13th lap)
PIQUET	1'52"72	(35th lap)

PIT STOPS AND RETIREMENTS

Stuck: retired 1st lap, suspension broken
Reutemann: retired 2cnd lap, accident
Fittipaldi: retired 4th lap, engine
Jabouille: retired 8th lap, spun and stalled
Arnoux: retired 16th lap, puncture
Andretti: retired 17th lap, broken driveshaft
Rebaque: stops on 14th, 19th laps, retired 22cnd lap, engine
Pironi: stopped 16th lap, check front track, change front tyres
Ickx: retired 25th lap, puncture, rear suspension damage
Lauda: retired 28th lap, engine
Rosberg: retired 30th lap, engine
Tambay: retired 30th lap, engine
Patrese: retired 35th lap, puncture
Villeneuve: stopped 36th lap, changed tyres and rear wing
Piquet: retired 43rd lap, engine

PROVISIONAL WORLD CHAMPIONSHIP CLASSIFICATION

(after the Argentine, Brazilian, South African, USA West, Spanish, Belgian, Monaco, French, British and German GPs).

1. Scheckter 35 pts. **2.** Laffite 28 pts. **3.** Villeneuve 26 pts. **4.** Regazzoni 22 pts. **5.** Depailler and Reutemann 20 pts. **7.** Jones 16 pts. **8.** Jarier and Watson 13 pts. **10.** Andretti 12 pts. **11.** Arnoux 10 pts. **12.** Jabouille 9 pts. **13.** Pironi 8 pts. **14.** Patrese and Mass 2 pts. **16.** Fittipaldi, Lauda and Ickx, 1 pt.

CONSTRUCTORS CUP

1. Ferrari 65 pts. **2.** Ligier 51 pts. **3.** Williams 38 pts. **4.** Lotus 37 pts. **5.** Tyrrell 21 pts. **6.** Renault 19 pts. **7.** McLaren 13 pts. **8.** Arrows 4 pts. **9.** Copersucar and Brabham 1 pt.

RESULTS

1. Jones	Williams FW07	1 h 24'48"83, 134.273 mph
2. Regazzoni	Williams FW07	2"91 behind
3. Laffite	Ligier JS 11	18"39 behind
4. Scheckter	Ferrari 312 T4	31"20 behind
5. Watson	McLaren M 29	1'37"80 behind
6. Mass	Arrows A2	one lap behind
7. Lees	Tyrrell 009	one lap behind
8. Villeneuve	Ferrari 312 T4	one lap behind
9. Pironi	Tyrrell 009	one lap behind
10. Lammers	Shadow DN 9B	one lap behind
11. De Angelis	Shadow DN 9B	two laps behind
12. Piquet	Brabham BT 48	three laps behind

Fastest lap: Villeneuve, 1'51"89, 135.707 mph, record

subscription coupon
to be cut our or copied

Name .....

Christian name .....

Address .....

I wish to subscribe for one year: £12
I enclose my remittance by cheque ☐ or money order ☐ to:

SNEP - Service Abonnements
7, rue de Lille, 75007 Paris - France
Foreign subscription rates on request

COPERSUCAR F6A: WAITING FOR THE F7

Emerson Fittipaldi won the World Championship in 1974, but he's never had the same success since. This year he wanted to get his own back, and reckoned that he had done it right. Everyone saw photographs of his revolutionary Copersucar F6 before the Argentine Grand Prix. The car had been designed by Ralph Bellamy who had been working with Lotus when they brought out the 78. But it was soon clear that the F6 was a complete failure. An 'A' version of the F6 appeared at Hockenheim, giving it a second chance of success.

by Giorgio PIOLA

The new Copersucar, nicknamed Concorde because of its strange nose section, made its first race appearance at Interlagos for the Brazilian Grand Prix and didn't show well there. It was suspected that it suffered merely teething trouble. But is was obvious at the next race, the South African Grand Prix, that the problems were a lot more serious.

The car was quite a lot different to other wing cars. Its side pods were not of classic design, starting much further back. Ralph Bellamy's intention was to make the car's pressure centre further back than normal.

But when Emerson spoke of his new car's handling, he frequently remarked: *"I don't seem to be able to notice any ground effect on the F6 at all."* He decided to retire the car after the Spanish Grand Prix so that it could be completely restudied. He got Fly Studio in Italy to do the work.

The F6 was modified by designers Caliri and Marmiroli (both ex-Ferrari), designated the F6A and appeared for the first time at Hockenheim.

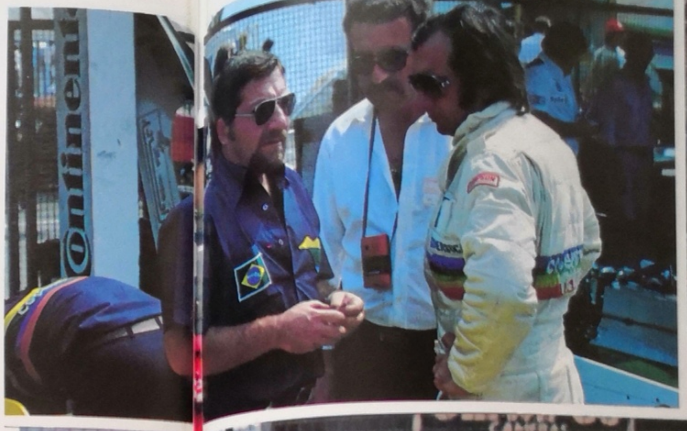
Fly Studio did a good job last year when they completely redesigned the Copersucar F5 originally designed by Dave Baldwin (ex-Ensign). But Fittipaldi was disappointed with the new car.

"We've virtually changed everything on the F6 in two months," explained Caliri. *"I've been concerned with aerodynamics, I've designed completely new bodywork. We've adopted a conventional style because we didn't have much time. Richard Divila joined us in Modena and Marmiroli and he have designed new front and rear suspension. We've also modified the cooling system. Before, the radiators were big, but they didn't do the job. We got better results using small radiators but better positioned."*

The F6A wasn't very competitive during the first practice session at Hockenheim. *"We've already had one test session at Silverstone,"* said Caliri. *"We hadn't modify the chassis before then, but it wasn't stiff enough, so we fitted some strengthening tubes. Perhaps that wasn't sufficient. When we go back to England, we'll study the stiffness again and also put the car through a wind tunnel test. We've also had problems with skirts. I haven't been to a Grand Prix since last year, and Formula One has developped a lot since then."*

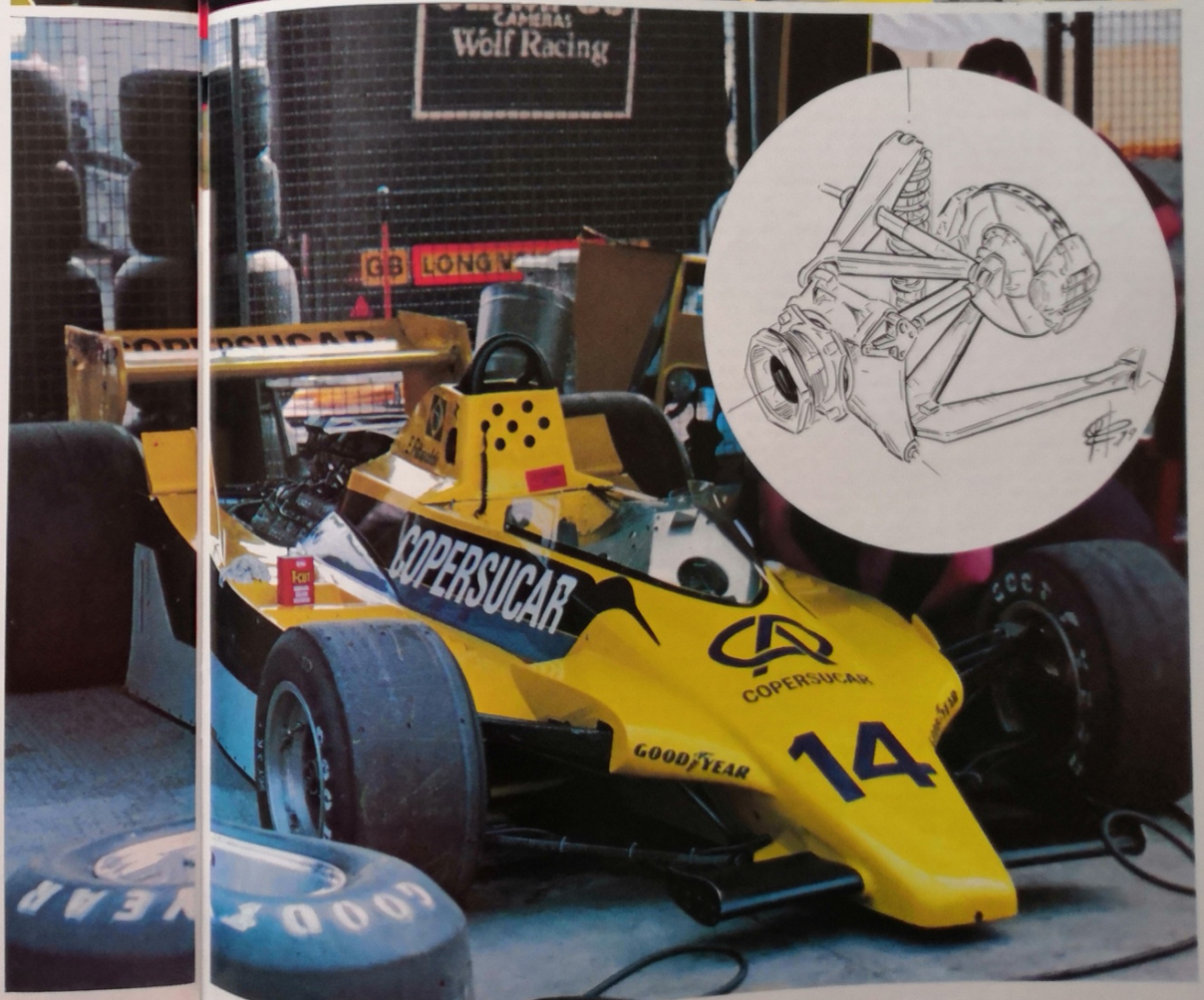
Emerson did a lot of aerodynamic testing at Hockenheim. *"When the skirts work,"* explained Caliri, *"we don't need the front nose fins. But the skirts don't often work. First of all we tried a normal sized fin, and then a smaller one."*

Emerson Fittipaldi's association with Fly Studio isn't at an end. Caliri has signed a two year contract to work with Richard Divila and Dave Luff. The final result should be a completely new Copersucar designed by Fly Studio. Caliri says, *"the car should be ready at the end of October, beginning of November."* Will it be a revolutionary car, or a conventional one? Caliri replies indirectly: *"I remember once at Ferrari when we tried long tails for Le Mans. We never managed to get the same results at the track that we'd got in the wind tunnel. Working in a wind tunnel is useful, but there's nothing like working at the track, and I think that a car like the Williams is the sort of car we should build".* □



The Fly Studio duo (Caliri on the left, Marmiroli in the middle) with Emerson Fittipaldi: a two year contract.

The Copersucar F6A side pods are the biggest of all those fitted to Ford-engined cars.



The new F6 has conventional bodywork. The radiators are horizontally mounted. Note the small flaps on the side pods in front of the rear wheels, and the small nose fins.
Drawing of the new rear suspension, typically conventional. There is a large lower wishbone, an upper rocker arm with wishbone, inboard shock absorber mounted beside the disc, and twin caliper Lockheed brakes.

DREAM DEBUT

BY MAURICE HAMILTON

Thursday seemed like an average sort of day. Geoff Lees had left his home near Tamworth and taken his car to the local garage. On his return, Helen Lees informed her husband that there had been a phone call from Peter Gethin, the ex-Formula One driver who takes an interest in Lees's affairs. Would Geoff call back immediately, it was important.

At 10 am the following morning Geoff Lees was strapped into Candy Tyrrell 009/3 waiting for practice to commence at Hockenheim. The full effect of Gethin's call was hitting home as Lees sat quietly listening to the sound of his breathing inside the white Simpson helmet. There was no question about it now. He was going to make his first Grand Prix appearance.

Jean-Pierre Jarier's sudden illness had left Ken Tyrrell staring at an empty cockpit and a list of reserve drivers. He didn't like what he saw, preferring to give the drive to a young hopeful rather than an experienced runner. Tyrrell's telephonist worked overtime as calls flooded in from interested parties. Peter Gethin was one of them, reminding Tyrrell of the past performances of G. Lees, a fourth and fifth in his first two Formula Two appearances last year, competitive performances in the Aurora series, two second places in CanAm this year.

Tyrrell needed little reminding. He knew about Lees already and admitted that he had thought of running the Englishman in a third car for last year's North Amercan Grand Prix. Unfortunately, the chassis rebuild programme made necessary by the Monza shunt precluded that. A meeting was arranged and it was soon established that Lees's CanAm performances would merit the necessary licence. Within hours, Geoff Lees was packing a clean set of Hawk overalls and making for the airport.

«I'm glad it happened so quickly». He said in his quiet voice tinged with a mild Midland accent, *«I haven't had time to get nervous or think about it too much. To tell you the truth, I can't really believe I'm here»*, he added as he watched the pit lane swirl by in full professional swing. Lees was the subject of photographers' attention as they took the opportunity to record a new mug shot. A film crew homed in and British journalists made the acquaintance of the man who could provide some welcome home news. Foreign journalists, scarcely able to spell Lees's name, quizzed Tyrrell on his choice of driver.

« He has shown a lot of promise and he had competed in the Aurora series which means that he has handled a DFV before. He knows how to start it for example and that's important when you are launching him straight into an official practice session. I know we are throwing him in the deep end but you usually find young drivers either make it or they don't. »

Lees made no mistake about his first day's practice by qualifying comfortably. Had he been overawed by such illustrious company on the race track ? «No», came the unequivocal reply. *«I didn't think about that because I was too busy learning about the car and trying to qualify. Ken Tyrrell told me that it would be difficult to qualify, saying that I shouldn't try too hardd he didn't want ad ms ! That Helped me relax and I tried to do exactly what he told me. At first I was a little disappointed to be so far behind Didier Pironi but I knew I could improve on Saturday»*.

While everyone watched the battle for the front rows of the grid during the final practice session, the blue Tyrrell number 4 lapped without fuss or drama. Lees was given a set of qualifiers, the only set he would get. There could be no mistakes. Tyrrell plugged into 009/3 and quietly issued instructions. The tyres would only be good for two laps. The first should be spent raising the temperatures. Once he reached the stadium, Lees should begin to build up speed for the second lap.

Lees left the pit lane knowing he had to mix speed with caution. He wanted to do a quick lap but not at the expense of a walk back to the pit lane and an embarrassing interview with K. Tyrrell Esq. *«I took it easy on the first lap»*, recalled Lees. *«I made sure I was on my own because I didn't want to be blocked or have the worry about someone in my mirrors. Coming onto the pit straight I put my head down and had a go. I used more revs, braked 50 mètres later and turned in later. I kept as steady as possible, going as quickly as I left safe to go. I could't believe the difference those qualifiers made. It was quite frightening in a way because they seemed to do everything twice as well. I kept feeling I could have braked even later than I had. I missed a gear coming out of the second chicane but that was the only mistake I made»*.

A respectable 16th and ahead of such notables as Rosberg and Mass. *«It was a good effort»*, commented Tyrrell. *« When he came past the pits, I could hear he was using more revs than before and he braked much later as he left the stadium. Bob Skene and I looked at each other and we both said «the lad's having a go» !*

Bob Skene and Steve Leyshon are the two mechanics who work on Jarier's car. Skene, a drole Aberdonian, and Leyshon, a bright eyed Welshman, form an ideal partnership in the true mechanic's mould of efficiency coupled with unflappable style. They had to accept the fact that a total stranger was about to step into the chassis which formed the hub of their working hours. Mechanics appreciate racing drivers, loath prima donnas. It was soon obvious to the two men that Lees was the former. *«He climbed into the car and after a few minor adjustments, he was off and getting on with the job»*, said Leyshon». *«What's more he brings the car back in one piece»*.

Lees had been most particular about keeping the car away from the kerbs as he got to grips with a ground effect chassis for the first time. *«The speed is not new to me because a CanAm car is just as fast»*, he observed on race morning. *«It's the grip and G-forces through the corners which are so incredible. My neck muscles were stiff after practice so I had a long steep in the bath last night and I feel much better this morning»*.

During the nerve-wracking countdown between the morning warm-up and the race, Lees sat camly outside the Candy - Tyrrell motorhome. *«I don't feel nervous»*, he said with some surprise. *«I suppose It's because it still seems too good to be true. I had always thought that if I ever make it into Grand Prix racing then the ideal teams would be Lotus or Tyrrell. And here I am driving for Ken Tyrrell, what more can you say» ?*

Not a lot, except to ponder on race tactics. *«I simply want to finish, run in the middle of the pack and bring the car home in one piece»*. Geoff Lees was as good as his word. 17th. at the end of the first lap, he went on to drive a controlled race, keeping in touch with his immediate rivals and finishing seventh, one lap down on the leaders, one place away from a Champion-s-hip point.

It was a workmanlike job that could be rewarded with a glass of rose over dinner at the Heidelberg Holiday Inn. *«The first corner was a bit hairy»*, he told Gethin. *«I was sandwiched between two cars and Rosberg and I indulged in a bit of wheel banging. After that I kept going as hard as I could without doing anything stupid. I didn't even think about my neck and the race didn't seem long because, again, I am accustomed to that sort of thing in CanAm. When Villeneuve made his pit stop, I misread my pit signal and thought it was Laffite who was catching me. So when the Ligier came to lap me, I mistakenly held him up for part of the lap. Apart from that, I was OK»*.

Having finished his meal, Lees went off to phone his wife. *«Helen really kept me going during my Formula Ford days»*, Lees had said earlier. *«I was running the car myself and she gave me the encouragement to go on»*. Lees rewarded his wife's faith by winning all three Formula Ford championships in 1975. Since then he has suffered the financial ups and downs familiar to any young racing driver as he moved into Formula 3 followed by Aurora, Formula 2, CanAm - and finally Formula One. There aren't many days like Thursday, but Geoff Lees makes the most of them when they come along. □

WASHING IN RECORD TIME

new Candy "Primato" range

Candy has launched a range of washing machines with new, very advanced characteristics.
All of these new machines have in common, long lasting, tough design, energy saving features and new washing methods.

There is a Candy for example, which has one special control, "ZOOM" which shortens the washing time, but still carries out the complete wash.
Thus when the clothes are only slightly dirty washing can be done faster (32 minutes quicker).

In order to wash the various fibres correctly the drum has **three different movements.**
One for strong fibres, one for delicate fibres, and one for extremely delicate fibres.
Just like washing by hand.

In addition there is a **Thermocontrol** knob which lowers the temperature of the water and saves energy.

Candy: washing machines, tumble dryers, dish washers, refrigerators, fridge/freezers, cooker and hobs.

Candy
a winning trade mark

CARLOS REUTEMANN'S DIFFICULT WEEKEND

To have two bad accidents in one weekend is not something anyone would wish for, especially if one is not responsible for either of them. Carlos Reutemann hit the guard rails twice at Hockenheim. Not surprisingly, he wasn't too happy about it.

by Giorgio Piola

The second qualifying session on Saturday afternoon had just begun. Already some drivers were setting fast times. In the Lotus camp, Andretti had fitted qualifying tyres early and had set fourth fastest time. Suddenly Nigel Bennett was on the alert. Carlos Reutemann should have gone past. He'd just left the pits and done one lap and the Englishman was waiting for him to go by again. Even if he was just warming up the car, he still should have been in sight by now. Bennett frowned, when a car breaks down on the circuit, it's not a good sign, and time is lost.

« Carlos Reutemann has crashed at the first chicane, » came over the loud speakers. Niki Lauda came into the pits and stopped beside Colin Chapman. *« Carlos has gone off, but he's OK, I saw him walking around the car. »* Chapman is relieved. When a driver disappears, it's always worrying.

Practice is stopped while Carlos's Lotus is retrieved. But the big Argentine still has not come back to the pits. Mimicha Reutemann looks pale. Colin Chapman notices and goes over to her : *« Carlos is OK, »* he assures her. *« Niki saw him walking beside the car. Don't worry. »* But Carlos's wife worries even more when she sees a doctor's car go out on the circuit. Chapman was in the back and Mimicha climbed in too. She was even paler than before

STRANGE ACCIDENT

Finally Reutemann got back to the paddock. Basically he was OK, but visibly shocked. At least he wasn't injured. *« I don't know what happened, »* Carlos tried to explain. *« The car suddenly spun and the next moment I was in the Armco. »* Perhaps something had broken, but the car was so badly damaged after the accident that it was hard to find out what. But a driver error could almost certainly be ruled out : Carlos was on only his second lap, far from driving at the limit. *« The marks on the track left by the car are very odd, »* said Didier Pironi. *« Something on the car must have broken. If it had just swopped ends by itself the marks would have been completely different. »*

The spare car took a time to prepare because the cockpit was set up for the rather shorter Mario Andretti. Carlos went to be examined by FOCA's Doctor Watkins. Watkins reassured Carlos. He felt well, a little shocked but otherwise fine. And to prove that he was neither physically nor morally unwell, he spent a while joking with personel from his former team, Brabham.

Carlos didn't drive the spare car for very long. The wheels rubbed against the uprights and the mechanics had to file the latter so that they'd run freely. At the end of practice, the Argentine had set a modest thirteenth fastest time. Just one year ago, the 79 s had been almost untouchable on the same circuit, but those days of glory seemed long past.

WILL HE ? WON'T HE START ?

After the Sunday morning warm-up, it was learnt that Carlos Reutemann almost certainly wouldn't start the race. The Argentine was suffering from a headache. *« He's not feeling well this morning, »* Bennett explained. *« His reactions are rather slow. »* Carlos, however, decided to start after all.

But he didn't come by at the end of the second lap : accident. We were watching the race with Raphael, the doctor that the South American drivers Fittipaldi, Reutemann and Piquet share. He told us, *« I strongly advised him not to start. His headaches were affecting his sense of balance. »*

Carlos stayed out on the circuit until the end of the race. When Mario Andretti retired on the 17 th lap, he went back to the pits to give them news of his teammate. *« I couldn't believe my eyes. Carlos was sitting on the bank watching the Grand Prix. »*

The Argentine explained later : *« I didn't want to go back to the pits. I wasn't looking forward to explaining why I went off. »* So we didn't see Carlos until after the race. And even then, it was he who came up to us to talk about what had happened, despite his well known shyness. He spoke in a calm voice : *« it's incredible, »* he told us. *« I wanted to drive quietly and steadily. I saw Patrese coming up so I pulled over to let him go by. I didn't want to hold him up. After he overtook me, he touched me and sent me into the Armco at over 125 mph. Two accidents in two days, that's bad. I've spoken to Patrese. He told me that he didn't see anything, couldn't understand it. He said his car weaved under braking ».* Carlos paused, taking into account his feelings and thoughts. *« When a car brakes badly, you have to concentrate twice as hard when you're braking, you've got to be careful ».* He admitted being very concerned with Formula One safety aspects. *« And Patrese wasn't the only one. There were four or five guys out there who should calm down a little. Look what happened at Dijon between Villeneuve and Arnoux ».* He paused again, ending his explanation with *« incredible ».*

PATRESE'S REACTION

In his team's motorhome, Patrese was angry. He had a completely different view of the accident. Over and over again he repeated that he didn't see anything, that he'd overtaken Reutemann quite normally and that he'd braked quite calmly. *« I didn't see anything and I didn't hear anything »*, he told us. The Italian was behind Mass at the time and he was scarcely in contention for one of the leading places.

Having said that, it was quite clear that the two cars had touched one another. The front left wheel on the Lotus had obviously been it. As so often happens, it was difficult to work out what had happened exactly. Photographs or films might clarify the situation because without them it's hard to work out exactly the position of the two cars.

It's possible that because of his braking problems, having overtaken Reutemann, Patrese braked a little earlier than normal which meant that Reutemann was closer than he had been and the two cars touched.

Whoever was responsible, there's no point in conducting a witch hunt after an accident in which the two drivers weren't really battling against one another anyway. There was no intention by either driver to hold up the other. Then again, less than a month ago, weren't we eulogising over the Villeneuve Arnoux dice at the French Grand-Prix ? Nearly every driver, even Arnoux's own teammate Jean-Pierre Jabouille criticised the two drivers. *« If you had that sort of fight ten times over, »* said Jabouille at Silverstone, *« the outcome would be different each time, and it certainly wouldn't turn out as well. It was really a miracle what happened at Dijon ».* The proof of that fact is the Reutemann Patrese incident at Hockenheim □

by Patrick CAMUS

SAUDIA-WILLIAMS

Williams-Ford FW 07/04:
Alan Jones (AUS)
Williams-Ford FW 07/02:
Clay Regazzoni (CH)
Williams-Ford FW 07/01:
spare.

The Williams went to Hockenheim as great favourites. The English exercise had shown the potential of the FW 07s on fast circuits. The cars were still fitted with long side pods for greater straight line speed, but even so, both drivers asked for a little more downforce. The adjustment had quite an effect on Regazzoni's car. He had too much downforce and had trouble overtaking Laffite because of lack of straight line speed in comparison to the Ligier, and wasn't nearly as quick as Jones.

Franck's weekend wasn't quite problem free, and Jones had to use the spare on occasions. Once again, he explained the simplicity of the car. *"Our cars are that much better because they're of simple conception and have been carefully designed. Furthermore, they use aluminium in order to make them light and not cost too much."*

It was just as well the German Grand Prix was only 45 laps long. Another tour of the circuit might well have cost Jones his win because of a punctured right rear wheel. Regazzoni also had problems during that last lap with the pump not picking up the last drops of fuel in the corners.

LIGIER-GITANES

Ligier-Ford JS 11/04:
Jacques Laffite (F)
Ligier-Ford JS 11/01:
Jacky Ickx (B)
Ligier-Ford JS11/03:
spare.

At Silverstone the theam discovered that part of the steering was wearing away, so Ducarouge had new mountings ont the uprights machined from steel for the three cars. Furthermore, two chassis (04 and 01) had been rejigged.

During the three days available for preparing for Hockenheim, the team tested various aerodynamic set-ups. Two factors seemed to work and were fitted to Laffite's car: the lower part of the engine was covered as on the William, while there was also an addition on the wing inside the side pods which was extended in order to cover and protect the exhaust system. Thus the extractors at the end of the side pods non longer did any work.

Ickx's car was fitted with the same system, except that this fibreglass work extended further. However, his engine was also enclosed. During the first qualifying session, Jacques only used 04 and found it ideal.

They set up the spare car on Saturday morning, but the clutch burnt out early on. On raceday Jacques' car was fitted with new brake discs and skirts made of carbon fibre. Ickx's fuel pump seized during the warm-up. It was minor problem, but not one that was easily solved as the fuel pump was hard to get at. Jacques chose very little downforce on the car during the race for straight line speed in order to keep up with the Williams and Renaults. Regga was able to pass and pull away from Jacques thanks to his two slides. Ickx had the same problem as Patrese: a high speed blow-out of the right rear tyre which damaged the rear suspension.

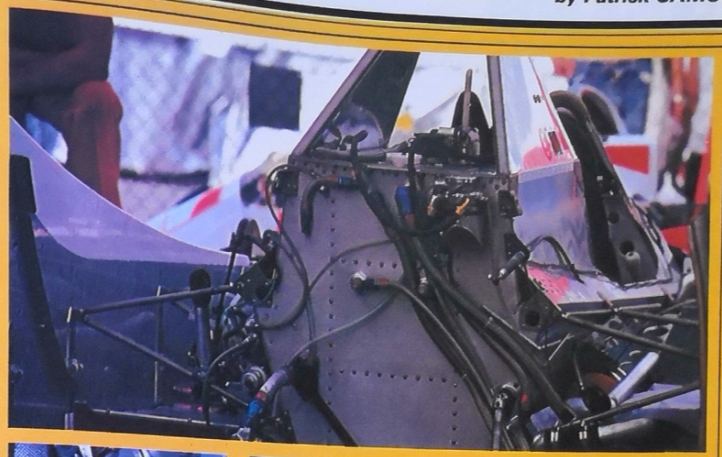
FERRARI SEFAC

Ferrari 312 T4/040:
Jody Scheckter (ZA)
Ferrari 312 T4/041:
Gilles Villeneuve (CDN)
Ferrari 312 T4/039:
spare.

The Italian cars were well sorted on a track that didn't really suit them. Forghieri brought along three different types of side pod which were tested by each of the two drivers. Increased downforce by the pods allowed less wing front and rear. And then the suspension was adjusted accordingly. They broke fewer engines than at Silverstone. Just one gave trouble during practice and the team did their best to hide the fact. During the untimed session on Friday Gilles had a double spin which damaged the suspension, while Scheckter damaged his rear wing when he went off the road. The main problems with the 312 T4s was that they slightly lacked top speed, and the traction wans't too good. The aerodynamic and suspension adjustments slightly improved the situation, but didn't completely solve it. The battle between Piquet and Villeneuve during the race was proof of the fact. The Ferrari gained ground under braking and in the corners but dropped back under acceleration. Villeneuve's stop was due to the rear wing splitting. Scheckter had no problems finishing fourth.

MARLBORO TEAM McLAREN

McLaren-Ford M29/1:
John Watson (IRL)
McLaren-Ford M29/2:
Patrick Tambay (F)
McLaren-Ford M28/2: spare.



Tambay's race was full of frustration. He started well, leading his teammate, but once again, the Frenchman couldn't stay in front. From the 15th lap onwards, his water temperature started to rise and then, on the 26th lap, the rear suspension failed. It wasn't the first time that this had happened, he'd had the same problem on Saturday morning.

Tambay's car was absolutely brand new, and ran for the first time during the first practice session. It was fitted with a different rear suspension mounting system. It didn't consist of a tube framework but a simple alloy plate. The combined sping/shock absorber was mounted three centimeters further forwards than on John's car. The geometry was identical. The bulkhead that supports the rocker arm had been reinforced since Silverstone.

Watson finished in a good fifth place after a steady race.

WARSTEINER-ARROWS

Arrows-Ford A2/1:
Riccardo Patrese (I)
Arrows-Ford A2/2:
Jochen Mass (D)
Arrows-Ford A1/3A:
spare.

After the British Grand Prix, the Arrows team began an intensive test programme at Silverstone. Southgate admitted that their setting up had reached about the middle of development, but it seems that the part that's been covered concerns straight line speed. the A2s were still not handling well. However, their cooling problems would seem to have been solved. The two cars no longer used the lower flap behind the engine, but were fitted with a more classic and more efficient rear wing. As well as problems with internal and external skirts, the Arrows had a number of water leaks caused by the considerable heat in the engine compartment.

The Arrows race was not that exciting. Patrese had a puncture in the right rear tyre when going through the long fast Ost Kurve, but Mass scored the first point for the new car.

CANDY-TYRRELL

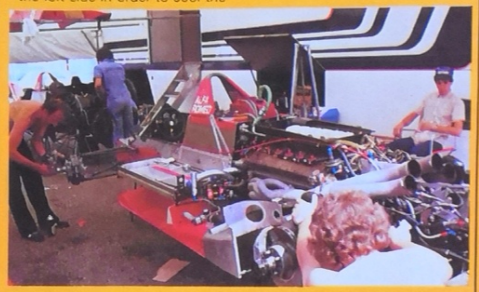
Tyrrell-Ford 009/04:
Didier Pironi (F)
Tyrrell-Ford 009/03:
Geoff Lees (GB)
Tyrrell-Ford 009/01:
spare.

'The Tyrrell team didn't have a very successful German Grand Prix. The cars were somewhat revised: the front suspension had been remounted slightly further back. The modification showed up well for Pironi went well in practice. His race was ruined from the start by a skirt which broke on the first lap. Geoff Lees drove sensibly throughout and came home in seventh place.

PARMALAT BRABHAM

Brabham-Alfa Romeo BT 48/4:
Niki Lauda (A)
Brabham-Alfa Romeo BT 48/3:
Nelson Piquet (BR)
Brabham-Alfa Romeo BT 48/2:
spare.

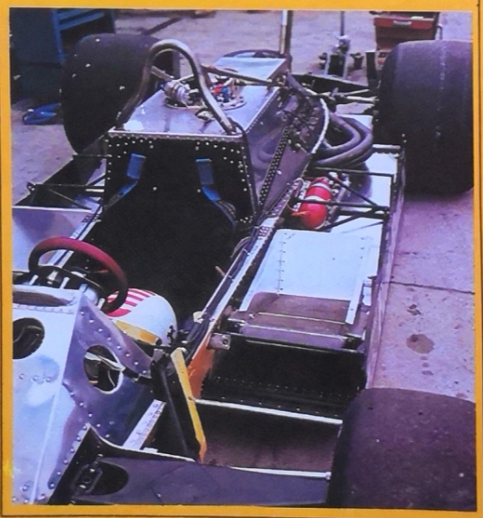
Bernie Ecclestone may have done well financially out of the German Grand Prix on behalf of FOCA, but his team didn't do as well.
The three chassis were devoid of magaphone exhausts seen at Dijon. On the other hand, there was a gap in the side pods on the left side in order to cool the fuel pumps. Piquet tried a thicker leading edge on his side pods in one session but didn't retain the configuration. The Brabham team didn't have the same trouble with broken engines and exhausts that they had at Silverstone. Chiti of Alfa Romeo attributing them to an insufficiently stiff engine mounting. On Saturday the BT 48s fitted their qualifying tyres early and stopped early. Piquet's engine started to show signs of posible failure, so it was changed, but it happened again on the 42nd lap when the Brazilian was in fifth place. Lauda broke his V12 on the 27th lap at the entry ot the stadium.



TEAM MERZARIO

Merzario-Ford A4/01:
Arturo Merzario (I)

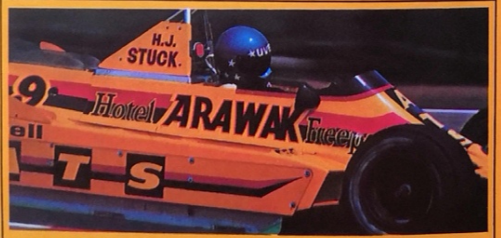
"That's it," exclaimed Arturo, *"now my car is completely finished. In England it was still incomplete."* Lapping in around two minutes, Merzario was going to have trouble qualifying.



SAMSON SHADOW

Shadow-Ford DN9/28:
Jan Lammers (NL)
Shadow-Ford DN9/3B:
Elio De Angelis (I)
Shadow-Ford DN9/5B: spare
Shadow-Ford DN9/4B: spare

Both of the race Shadows were fitted with the new suspension first tried and argued over at Silverstone, while the spare cars had the older suspension.
As with a number of other cars, the Shadows had brake scoops as well as new scoops made of flexible platic behind the side pods and rear wheels. The two drivers broke numerous skirts (in particular the left ones) which were impossible to repair because of their carbon fibre construction. For most of the untimed practice on Friday the Shadows were to be seen stationary in the pits. Lammers had a broken exhaust and De Angelis had burnt the clutch. Neither of the Shadows ran particularly well in the race although Lammers was slightly happier, despite fluctuating fuel pressure.



ATS WHEELS

ATS-Ford 02/03:
Hans Stuck (D)
ATS-Ford D1/02:
spare.

In actual fact, Stuck didn't really have a spare car but an exhibition car without fuel tank and one whose engine wouldn't work. the team had been working on their new car during the two weeks separating the two Grands Prix. The gearbox broke during the Saturday morning practice session, and it was the engine's turn in the afternoon. A cooling scoop had been fitted to the fuel pump in order to combat vapourisation and every now and then, a bucket of water was emptied over it.
Hans caused his home crowd to reack unkindly when he went down the escape road into the stadium. The front left rocker had broken under braking into the stadium.

MARTINI RACING TEAM LOTUS

Lotus-Ford 79 ML 23:
Mario Andretti (USA)
Lotus-Ford 79 ML 22:
Carlos Reutemann (RA)
Lotus-Ford 79 ML 21: spare.

Not a Grand prix that will stick in Colin Chapman's mind as one of the best. The disappointment of the weekend seemed to be highlighted by Carlos Reutemann's two accidents.
There were no particular modifications on the two 79 race cars. The rear suspension was mounted slightly higher than before. The 80 didn't make the trip, Andretti reckons it's a disaster. On the other hand, Chapman is working on a new version of the 79 which should appear at the Austrian Grand Prix. He hasn't completely forgotten the concept of the 80.
At the end of the official Friday session, Reutemann had only set 11th fastest time due to an electrical problem. The V8 was replaced that evening but the problem still wasn't eliminated. They changed the spark box three times but still it didn't improve. Ten minutes after the start of the official session on Saturday, Carlos went off the road in a big way at the first chicane, the rear suspension very badly damaged. The condition of the car didn't allow the cause of the accident to be determined but it was suspected that a lost skirt caused him to go off. The spare car wasn't ready so Carlos didn't do any more laps that afternoon.
During the Sunday morning warm-up, the Argentine did only a few laps. The wheel rims had a smaller diameter than those suitable for the front uprights and they were found to be rubbing.

RENAULF-ELF

Renault RS 11:
Jean-Pierre Jabouille (F)
Renault RS 12:
René Arnoux (F)
Renault RS 10:
spare.

The Renaults were still basically as at Silverstone, with little downforce, but they didn't give the results expected. On Friday morning, shortly after setting his best time, Jabouille discovered the earth at the side of the track and spun. It cost him both skirts, and he couldn't continue practice until much later because the French team didn't have a spare car on the first day. In the afternoon Jabouille set his winning 1'48"48 which no one approached. He himself admitted that he probably wouldn't have been able to do the time without a couple of tows during the lap.
On Saturday morning Arnoux's V6 lost power which was finally attributed to valve springs. *"I lost around 600 revs which is important for straight line speed."* But not only did he miss out on that session, but in the afternoon well. the spare had finally arrived in Germany, but there was still three hours of work to do on it. So René could not defend his grid position. Jabouille took part in this second official session, but only with 20 minutes to go and came in shortly after with btrake trouble.
The two Renaults scarcely had a fruitful race. Jabouille spun at the Sachs Curve and couldn't restart on the seventh lap, and Arnoux had the right rear tyre blow out at about 170 mph on the ninth lap. Hockenheim's heat caused the Renault's turbocharged engines to lose a little power, but at least they didn't have the same trouble as last year.

COPERSUCAR-FITTIPALDI

Copersucar-Ford F6/01:
Emerson Fittipaldi (BR)
Copersucar-Ford F5/1:
spare.

Finally the former World Champion had his "new" car. It was based on the original Concorde but the side pods were longer. Front nose fins were fitted for the first time. The front suspension was as on most Formula One cars: wide bottom wishbones and a upper wishbone operating combined springs and shock absorbers in the front of the monocoque. The rear suspension consisted of a relatively small lower wishbone with a rocker operating a similar shock absorber/spring action mounted beside the bell housing.
The half-shaft is mounted close to the top link in order to keep it out of the air stream.
Emerson was disappointed with the handling of the new car. *"I can't judge how good its ground effect is because the skirts are sticking. Apart from that, the suspension settings are only guesswork."*
A number of little problems appeared: parts were ill-fitting and there were various leaks. Emerson did the first session without nose fins, then used them in the second, he had them reduced by half for the third session, but even so, lost one of them on the track.
On Sunday morning, the mechanics adjusted the skirts system, but Fittipaldi retireed with loss of oil pressure.

OLYMPUS-WOLF

Wolf-Ford
WR 8: Keke Rosberg (SF)
Wolf-Ford
WR 9: spare.

During practice Rosberg used both WR 8 and 9 without really finding the best handling. He was one of the first to go off the track on Friday but without damaging the car. He went out again in WR 8 instead but stopped shortly after because the rear left caliper was leaking brake fluid. He set an unflattering 17th fastest time in practice, and his race was equally unexciting. An unhappy weekend was brought to an unhappy conclusion when the engine puffed out smoke and he retired.

TEAM REBAQUE

Lotus-Ford
79 ML 19:
Hector Rebaque (MEX)
Lotus-Ford
78 ML 18:
spare.

Neither of Rebaque's Lotus had been modified as he's busily having his own car built up. It's been designed by Geoff Ferris of Penske and constructed by Dereck Walker and should appear for the first time at the Austrian Grand Prix. At Hockenheim, the handling of the Lotus 79 left a lot to be desired but it was the skirts that were giving the most trouble. On the 17th lap, Hector retired because of engine trouble, but he'd done quite a few laps with the right skirt stuck up.

TEAM ENSIGN

Ensign-Ford
MN 179:
Patrick Gaillard (F)

Their British Grand prix appearance had brought new hope to the team. They'd even done wind tunnel tests to determine a new shape for the wing inside the side pods. A small fin ran the length of each side pod and the extractors were slightly higher than before. The engine was enclosed in aluminium underneath but that was damaged on the Friday and not replaced.

On Saturday morning, the Ensign went off into the sand at the Sachs Curve. Then during the official session in the afternoon, the rear suspension ont the right hand side gave way in the first chicane. Patrick felt that the car wansn't quite as it had been and continued slowly, accelerating progressively until the Sachs Curve where he went off again. The rocker had broken and the side pod was damaged.

They managed to repair the car for the second half of the session. But Patrick only managed a few laps which allowed Rebaque to qualify during the final minutes of practice.

Even though he found the car a little less understeering than on the Friday, patrick basically wasn't very happy with the car's handling. he didn't do the warm-up. *"I'm first reserve, but even if I could start, it wouldn't really serve any purpose."*

The new Formula 1 Tissot. High-performance instruments at a fair price.

World's most exciting scene. Formula 1 racing. Tissot shares its spirit of performance. It uses advanced technology, precision and experience, tested under the most challenging conditions. To produce superb watches. Every one a winner.

The latest Tissot F1 Collection. Tissot Seastar. Magnetic clutch for instant hour correction. Electronic adjustment to the precise second. 3-year energy reserve. Tissot Chronographs. 6-function watch and complete timing system. Genuine Lap, Split. 1/100th second up to 24 hours. Other models with Multi-Alarm, an electronic agenda on your wrist. Tissot TS-X2. The complete time system: Watch. Chronograph. Alarm/Time reminder. Chime. World time zones. All with worldwide guarantee. At your Tissot dealer where quality is in good hands.

TISSOT

OFFICIAL TIMEKEEPER OF TEAM LOTUS

Come to Marlboro Country
Marlboro
Marlboro
FILTER CIGARETTES
MADE IN U.S.A.
Marlboro, the number one selling cigarette in the world.